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Algeria's Boumedienne Dies; Bitat Named Interim Leader

ALGIERS, Dec. 27 (NYT) — Houari Boumedienne, who ruled Algeria for 13 of its 16 years of independence and made it a leading champion of the claims of Third World countries, died early this morning.

His age was uncertain — the year of his birth has been reported variously as 1925, 1927, 1930, 1932 and 1934. According to an account based on an interview with his father, he was 46.

"The nation is in mourning," the 8 a.m. radio news said, giving Algerians the news of the death of their president.

He had been in a coma for almost six weeks. The brief radio announcement said that the one-time guerrilla commander died at 3:55 a.m. in Mustafa Hospital after a sudden deterioration of his condition.

"We are all Allah's and to him we return," the announcement concluded. It was followed by the singing of verses from the Koran.

Unprecedented Treatment

The taciturn, strong-willed leader, who named no successor, is believed to have died from a rare blood and bone marrow disease known as Waldenstrom's syndrome. About 50 doctors from 12 countries — including Dr. Jan Waldenstrom, the Swedish discoverer of the disease — had been flown here to treat Col. Boumedienne. In an international rescue effort without parallel, the men who have been anonymously governing Algeria since Col. Boumedienne returned on Nov. 14, very ill, from a long medical visit to the Soviet Union, moved quickly today to assure Algerians and the outside world that no power vacuum had developed.

An extraordinary session of the National Popular Assembly was called. In keeping with the two-year-old constitution, speaker Rabah Bitat, 53, was proclaimed Algeria's interim president.

Bitat Assumes Interim

Mr. Bitat told deputies, ministers, senior military officers, officials of the ruling National Liberation Front and accredited diplomats that Algeria's "young institutions" were passing through a "hard and terrible time." But he expressed confidence that they would "not be affected by events or the death of men."

Mr. Bitat is the last of the so-called "historic nine" founders of the anti-French guerrilla movement who still holds a

position of some consequence in the country. Article 117 of the constitution specifically bars him, as speaker of the assembly, from holding his interim presidency for more than 45 days.

"Upon assuming this high function," Mr. Bitat said, at times appearing to choke back tears, "I ask that you help me to accomplish this mission with dignity and integrity. We must demonstrate once again to the world the maturity of the Algerian people."

The interim president promised to defend Algeria's "irreversible socialist character, its national independence and its territorial integrity." He said that he would respect "the letter and spirit" of his oath.

From the constitutional moves initiated today, it appeared that the military and the eight-man Council of the Revolution, the remnant of the junta that came to power with Col. Boumedienne in a 1965 coup, had decided to follow the constitution and its stipulation that an extraordinary NLF congress nominate a successor to a deceased president. The nominee is then supposed to be popularly elected.

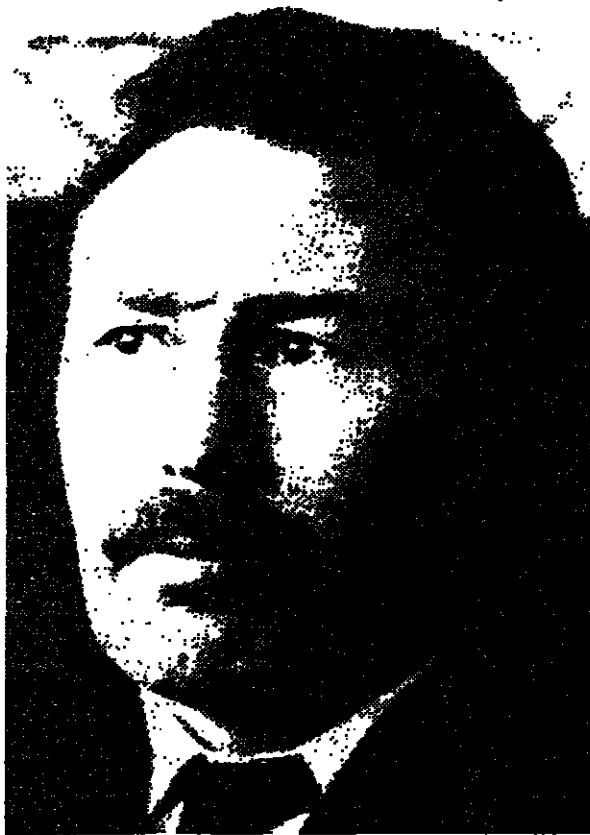
Solemn Procession

The manner in which the internally divided council will organize the congress remained uncertain. The details of preparing a state funeral on Friday — the late president is expected to be buried in the Alia Cemetery near Algiers — a 19th-century Algerian resistance hero — and the start of 45 days of mourning have momentarily eclipsed political speculation.

Before the special assembly session, cars carrying the council members, cabinet ministers and close advisers of the president followed the van that transported his body from the walled Mustafa Hospital to the hillside Palace of the People, where his sealed, flower-covered bier lay in state tonight. A photograph of the late president led the solemn procession.

Along the route, ordinary Algerians at times broke through a security cordon to join the procession. Men shouted lamentations and women cried piercing wailings.

Elsewhere in the capital, groups of youths moved through the streets crying out a mixture of religious and political slogans: "Allah is great," "The people and the army are with you, Boumedienne," "There is no God but Allah, and Mohammed is his prophet," "Boumedienne lives," "Reaction



Houari Boumedienne

is getting nothing." "Mobilization and vigilance against reaction."

The flow of people into the streets appeared completely spontaneous at times, although some of the shouted slogans were clearly in keeping with the theme of "revolutionary vigilance" that has been sounded by the state-run press, radio and television for several weeks. Around Algiers University, a large crowd of students, some of them with tears in their eyes, stopped traffic altogether.

• Boumedienne Ruled in Mystery. Obituary Page 2.

Fuel Rationing Imposed

Iran Troops Kill 4 In Funeral Parade

TEHRAN, Dec. 27 (AP) — Anti-government protesters, some of them armed, fought bloody street battles today with the troops in what the opposition called a "decisive" stage in Iran's violence. Meanwhile, an oil workers' strike cut production to near zero, and the government imposed fuel rationing.

In the bloodiest incident, troops opened fire on a funeral procession for an anti-shah professor, and hospital officials said that at least four of the thousands of marching mourners were killed.

Officials at Pahlavi Hospital said they had received 4 dead and 22 wounded from the attack on the procession. A spokesman for the National Front, the chief opposition group, said at least 65 had been killed, and a government spokesman denied that there were any deaths, although he said that several persons had been wounded.

Without hospital reports, casualty figures issued by the two sides have been difficult to verify independently.

The National Front spokesman said several persons were shot and killed in other clashes today between security forces and demonstrators in Tehran.

Soldiers had allowed the funeral procession to take place on the condition that there be no anti-shah violence. Reporters who witnessed the march said that it began peacefully from Pahlavi Hospital but that when it reached the 24th of Esfand Square, about a quarter-mile away, the troops opened fire.

The university professor, who had been taking part in an anti-shah sit-in, was shot and killed yesterday, reportedly as he leaned from a window to shout support to protesters during a demonstration.

A National Front spokesman said he did not know why the soldiers fired on the funeral procession.

But he said he believed that soldiers along the square may have mistakenly thought that troops accompanying the marchers had deserted to the opposition. Reporters said some soldiers had escorted the marchers to insure that the procession was peaceful.

Squads of elite troops were marching through Tehran's streets today, shouting to shoulder their faces covered by gas masks. Armored cars with 50-caliber machine guns mounted on the turrets maneuvered in the area of the square.

Heavy bursts of gunfire shook (Continued on Page 2, Col. 6)

Set Up Overnight on Arab Land

Israeli Army Dismantles 2 Illegal Jewish Outposts

JERUSALEM, Dec. 27 (Reuters) — The Israeli army moved swiftly today to dismantle two illegal Jewish settlements set up stealthily during the night on Arab land overlooking Jerusalem.

In a Tel Aviv speech, Foreign Minister Moshe Dayan said the Israeli government plans to establish 20 Jewish settlements within the next four years in the uninhabited Jordan Rift valley.

The settlement attempt, carried out by the extremist Gush Emunim nationalist movement, was regarded as a test of the intentions of Prime Minister Menachem Begin at a time when delicate efforts are being made to revive the search for a Middle East peace accord.

The settlers clambered in darkness and pouring rain up the slopes of Nebi Samuel and Tel Hadasha, two hills just north of Jerusalem. They set up tents, with a corrugated-iron kitchen on each site, dragged up some camp beds and proclaimed themselves founders of two new Israeli outposts.

zeal to establish a Jewish presence in all parts of what it regards as the biblical promised land, accused the government of lacking real enthusiasm for settlement.

"Each day for the 18 months since the Begin government came to power we have been hearing promises," said Gush Emunim official Yosef Arzieli. "But it is all talk and nothing is being done. We plan to put Begin to the test."

The Gush Emunim leadership announced plans to make more settlement attempts this week, climaxing with a large-scale effort Sunday atop the mountain overlooking Nablus, biggest Arab town in the area.

Brussels Meeting 'Useful'

CAIRO, Dec. 27 (UPI) — President Anwar Sadat said today that the Egyptian-Israeli-U.S. meeting in Brussels was "very useful" and could lead to a revival of the stalled treaty negotiations between Egypt and Israel.

Mr. Sadat spoke to reporters after meeting with about 300 members of parliament who belong to the ruling National Democratic Party.

In Washington, U.S. sources said Egypt and Israel will decide within a week when and where they will resume cabinet-level talks. Administration officials said yesterday that both sides have agreed to resume the deadlocked talks, with the United States as mediator.

U.S. officials said Israel, despite accusing the United States publicly of favoring Egypt, agreed to Secretary of State Cyrus Vance staying on to mediate the next round of talks.

Talks to Start Today

TAIPEI, Dec. 27 (AP) — At least 10,000 protesters flung eggs and mud and shouting "Carter is a cheat!" greeted a U.S. delegation today as it arrived to begin talks with Taiwan officials aimed at making the separation of the two nations amicable.

Vice President Frederick Chien sounded a stern note in a welcoming speech for the diplomatic-military delegation at the airport, telling the Americans that the economic and cultural ties the Carter administration wants to retain with Taiwan can be continued only on a government-to-government basis.

Mr. Chien said the U.S. recognition of Peking had "seriously impaired the peace and security of the Asian-Pacific region" and caused "disastrous damage." The United States will end the U.S.-Taiwan mutual defense treaty at the end of next year.

As the delegation and Nationalist officials left the airport, accompanied by newsmen, demonstrators waved the Nationalist flag of Taiwan and hurled at their automobiles, beating on the sides, throwing eggs and mud and striking the cars with flags.

Decision Denounced

Signs denounced the U.S. president. "Mr. Carter, you may sell out human rights, freedom and democracy, but the ROC (Republic of China) will never be sold," one said.

The police were able to hold back many in the angry crowd. There were reports of injuries. A girl said: "We just want to let America know we are not a voiceless people. We'll have a second chance to show them when they leave here."

Another crowd of 1,000 to 2,000 demonstrators gathered in front of Taipei's Grand Hotel, where the U.S. delegation was to stay overnight before starting talks tomorrow.

Taiwan Protesters Mob Arriving U.S. Delegation

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Gift of Embassy

WASHINGTON, Dec. 27 (UPI) — The State Department filed a strong protest today with the Taiwanese government over the hostile mob that greeted the U.S. delegation in Taipei.

The District of Columbia Recorder of Deeds said today Taiwan filed documents: Friday turning over its embassy, chancery and a mission building to the Friends of Free China, a nonprofit corporation.

Diplomatic sources said, however, that there still was a possibility the property, worth about \$2.7 million, might be claimed by Peking.

In Campaign of Hit-and-Run Desert Attacks Ogaden Guerrillas Claim To Hurt Ethiopian Forces

By John Darnton

MOGADISHU, Somalia, Dec. 27 (NYT) — Nine months after Ethiopian and Cuban troops swept through the Ogaden to reclaim it from ousted Somali soldiers, Somali-backed guerrillas are waging and intensifying a campaign of ambushes and hit-and-run attacks that has made that victory seem almost illusory.

The commanders of the two guerrilla groups in the Ogaden — the Western Somali Liberation Front and the Somali Arab Liberation Front — have claimed a string of small-scale, but nonetheless significant military successes.

The Western Front also has admitted for the first time that Somali guerrillas participated in the offensive in July of last year. And the leader of the Abo Front conceded that his organization receives weapons from the Mogadishu regime, which obtains them from friendly Arab countries.

The headquarters of both guerrilla organizations, which were practically deserted in the months following the defeat earlier this year, are once again teeming with young men who sit in the dusty courtyard, waiting to go to war.

The guerrilla leaders conceded that they do not hold a single major town in the disputed region of eastern Ethiopia. But they said that after the disastrous defeat in March their forces had regrouped, recruited new fighters and now are able to roam freely through much of the countryside.

"We have reorganized our people politically and militarily, so that today there are thousands of our troops in the country, and the war is going on in every part of western Somalia," said Abdullahi Hassan Mohamed, the secretary general of the Western Front. The phrase "western Somalia," explicit in its territorial claim, is commonly used here instead of "the Ogaden."

The commander said that "large engagements" were avoided whenever possible but that when necessary the guerrillas mustered at battalion strength — between 400 and 600 fighters — for "battles that last for days."

Mohammed Ali Rube, the secretary general of the Abo Front, a related group that carries on the war in the three southern Ethiopian provinces of Sidamo, Bale and Arussi, said that his troops had free

\$1.2 Million Stolen In Switzerland Raid

GENEVA, Dec. 27 (AP) — Four bandits escaped with about 2 million Swiss francs (\$1.2 million) after a holdup near a suburban shopping center this morning.

Police said that the bandits attacked three guards and two employees of the Balexert branch of Swiss Credit Bank as they were about to carry the money into an armored vehicle outside the shopping center.

In general outline, the claims of the front leaders were substantiated by Western Arab and African diplomats here. But most diplomats believe that the guerrilla movements often dramatize the scope of specific engagements and exaggerate the "body count" of enemy killed as they did through the eight-month war.

According to the best-informed neutral observers, the scale of hostilities in the Ogaden, the arid region outside the major towns and garrisons.

"We are the ones controlling the area," he asserted. "The Ethiopians stick to their camps. We terrorize them in small groups and we control the roads, so they do their reinforcements by plane."

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tion peopled by Somali nomads conquered by Ethiopia in the late 19th and early 20th centuries, is about what it was shortly before Somali regulars invaded in July of last year and pushed the conflict onto the international stage.

For the Ethiopians and their Soviet and Cuban allies, who switched their backing from Mogadishu to Addis Ababa during the war, this suggests the prospect of a long-drawn entanglement with hardened fighters who enjoy substantial popular support. Cuba, which recently helped Ethiopia roll back rebel advances in the northern province of Eritrea is caught in a similar situation in Angola where it has been

(Continued on Page 2, Col. 4)

Kim Dae Jung Freed Seoul Dissident Resumes Opposition After Release

By William Chapman

SEOUL, Dec. 27 (WP) — Kim Dae Jung, South Korea's principal opposition leader, was released from confinement today and promptly resumed criticism of the government that jailed him for dissent 2½ years ago.

Mr. Kim called the government a "dictatorial system," asked for the end of President Park Chung Hee's emergency rule, and said that he would continue his criticism even if it meant returning to prison.

In an interview seven hours after his release, Mr. Kim said that he was unsure how much freedom the government would allow him. "But, anyhow, it is clear that I will devote myself to the people and to the restoration of democracy in this country at all costs," he said. "That is my duty for my people."

He called on the government to "lift the state of emergency that bans criticism — it was under this emergency decree that he was arrested in 1976 — and urged release of all 'other political prisoners.' His 'final goal,' he said, was to 'restore democracy.'"

'I Am Ready'

His comments, in a written statement and in the interview, amounted to a new test of the Park government, which in the past has arrested people for less direct criticism. He said he is aware that he could be returned to confinement for making the criticisms. "I know that I am ready," he said.

Mr. Kim relaxed with his wife, his old rival, President Park, who was delivering his inaugural address in a downtown auditorium. Mr. Park did not mention the amnesty which freed Mr. Kim, but he seemed to work for a political

system that would uphold "disciplined liberalism." He pledged greater efforts to build democratic institutions "through which individual citizens will participate with creativity and devotion in the development of the nation."

Mr. Kim, 53, was released in the early morning hours while the streets of Seoul were almost empty because of a curfew that begins at midnight. His release was part of a broad amnesty announced last week to coincide with Mr. Park's inauguration today for a new six-year term. The amnesty decree suspended jail terms for 106 political prisoners, about half of whom are students arrested in demonstrations.

Relaxing at home with relatives, friends and political associates, Mr. Kim said that he gained weight during his confinement. He said that he feels "fairly well," despite pains in his joints. He suffers from an ailment similar to arthritis and moves with difficulty. For the last year, he had been confined to a heavily guarded room in Seoul National University Hospital.

He and 17 others were arrested in March, 1976, for a manifesto calling for restoration of democracy. All the others were released before him.

In the 1971 election, Mr. Kim ran strongly against Mr. Park, winning more than 45 percent of the voters' candidate of the New Democratic Party. He became a principal spokesman for religious and political dissident during the first severe government crackdowns.

In 1973, he was abducted from a Tokyo hotel by persons still unidentified, and forcibly returned to Seoul, where he was placed under

(Continued on Page 2, Col. 4)

Cambodia Fears Vietnam Seeks to 'Swallow' It

(This is the second article of a series by Elizabeth Becker, the Washington Post correspondent in Phnom Penh from 1973 to 1975. She recently became one of two U.S. journalists allowed to revisit that country for the first time since the Communist victory in 1975.)

By Elizabeth Becker

KOMPONG CHAM, Cambodia (WP) — As our strange convoy, a white Mercedes sedan sandwiched between two jeeps loaded with soldiers, bumped along Route 7 headed for the Vietnamese border, I remembered what I had been told before leaving Washington.

U.S. analysts attempting to figure out what was really happening in the current war between Vietnam and Cambodia had suggested that I ask Cambodian officials to take me to Krok, Snoul or Mimot — three towns near the Vietnamese border.

"They won't take you there," an official had asserted. "The whole area is in the hands of the Vietnamese."

While the analysts may be correct that some border areas of Cambodia are under Vietnamese control, I can report conclusively that Krok was not in Vietnamese hands at the time of our visit.

My request that we be permitted

to visit the two other border towns was declined on grounds that the road was within range of Vietnamese artillery and the trip was thus "too dangerous."

Harvesting Rice

But here we were on a bright December morning on our way from Kompong Cham, an old provincial city on the Mekong River, to Krok. As we drove past farmers harvesting in fields of ripening rice, the only guns to be seen were the automatic weapons of our escort.

I told Pin, the Cambodian army commander who was our guide that morning, how Western experts felt that Vietnamese forces were in control of much of this area.

"I know what they think," he said with a smile. "A friend told me he heard over the radio that the Vietnamese hold positions in Kompong Cham City."

When we arrived at the village of Suong, our convoy stopped at an official government house where the three of us — British scholar Malcolm Caldwell, Richard Dudman of the St. Louis

napalm burns and a stray artillery shell damaged the walkway and a tower of the temple during the war. See Story Page 2.

The 2 Say They Were Wary Allies During U.S. War in Indochina

Post-Dispatch and I — were given a military briefing.

[Mr. Caldwell was later assassinated in Phnom Penh.]

Pin laid out a map of the region on the table and told us that Vietnamese forces had overrun a large part of this area a year ago. "The Vietnamese killed 200 or 300 and kidnapped 300 or 400," Pin said.

Cambodian forces drove the Vietnamese troops back following that offensive, he said, and beat back a second Vietnamese attack during the summer.

Now, Pin said, the Vietnamese were trying again. He claimed that this time Vietnamese planes had bombed three border villages. But the ground fighting this time was lighter, he said.

"They launch an attack, we concentrate on their flanks, kill a few of them, and they go back."

Following the briefing, we resumed the journey to Krok. As we neared the border town, I could hear for the first time the thump of artillery and the sound of a jet flying overhead.

"Enemy," Pin said.

The only indication that the Vietnamese Army might be near was an occasional puff of smoke in a distant field, which Pin claimed was caused by incoming Vietnamese artillery shells.

Our visit to Krok — the closest I got to the front during my two-week journey — illustrates the difficulty the world has had in following this strange war between two former allies.

Western military analysts have found it almost impossible to evaluate the conflicting claims of invasion and counterinvasion emanating from Hanoi and Phnom Penh.

Unlike during the U.S. war in Indochina, there are no Western reporters keeping track of the ebb and flow of this war from either side of the border.

We were, in fact, the first non-Communist Western reporters allowed in Cambodia — Democratic Kampuchea, as it is now formally known — since the ouster of a jet flying overhead.

"Enemy," Pin said.

(Continued on Page 2, Col. 4)

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Boumedienne Ruled in Mystery

Boumediene's Death May Alter Fate of Predecessor, Ben Bella

No one but a limited number of jailers has seen Algeria's first post-war president since then. Col. Zbiri lives in exile. He broke with Col. Boumedienne in 1967, when loyalist troops crushed his abortive coup attempt.

Pinochet Changes Chile Cabinet, Ousts Economy, Labor Ministers

replaces Mr. Costa. Miguel Kast, 30, enters the 17-man Cabinet as planning minister. Gen. Jaime Estrada takes over the Housing Ministry, lawyer Gonzalo Vial receives

Sweden Lists a Drop In Births This Year

The births increased the population by 18,000 for a total of 8,285,000, the bureau said.

Restaurant Laurent.

MENU
*Le foie gras frais en gelée au Sauternes / Le consomme double
 aux palourdes / Le homard à la nage au caviar d'Iron.
 La mignonnerie de chevreuil Laurent (Pore forcée aux aïreilles).
 Le gratin au vieux champagne / Le chapon fin en salade.
 Les dîches de 1979 sonnent la bonne et heureuse année.
 Le cœfi accompagné de mignardises.
 Champagne Mumm Cordon Rouge 1973 (1/2 bouteille per pers.).*
RESERVATIONS : 225.00.99/359.14.49.
 Black tie.

ri is reported to have told
your clothes. Don't try to
ers has seen Algeria's first
ri lives in exile. He broke
loyalist troops crushed his

... and assumed command of military effort against the rebels in western Algeria. A year later he took over Algerian training bases in Morocco. In 1960, he became chief of staff of the army with headquarters in Tunisia. He was one of the combat

break of the current fighting last December.

Cambodia has charged that Vietnam, which only a month ago signed a 25-year friendship treaty with the Soviet Union, has become the "Cuba of Southeast Asia" — a stalking horse for extending Soviet influence.

our country and improve the people's living standards, the dictatorship of the proletariat in our country cannot possibly be consolidated and we will be at the receiving end when a new war of aggression breaks out," the editorial said.

ANGKOR, Cambodia, Dec. 27 (AP) — Cambodia today permitted 16 foreign journalists to visit the temple of Angkor Wat, the ancient temple complex that had been closed during eight years of war and revolution.

kor, with its 54 towers, is located 140 miles northwest of Phnom Penh. It covers 60 square miles and is studded with more than 60 monuments.

The Angkor area was captured by insurgent Communist forces, dr-

Southeast Asia and the world, because Vietnam is a Soviet puppet and carrying out the strategy of Soviet international expansionism," Pol Pot told me.

While my two-week journey does not enable me to provide a definitive report on the current military situation throughout Cambodia, I was given a remarkable document in which Cambodia for the first

Rebels Roam In Ogaden

On Dec. 12, the Ethiopian southern sector command held a two-day

The "Black Paper" also discloses that when President Nixon ordered the allied invasion of Cambodia, in 1970,

large-scale enemy invasion," the editorial said. "All other work, including the party's political work, will focus on and serve this central task. There must be no political

The Chinese have also complained bitterly of Moscow's new friendship treaty with Vietnam. Peking says that there are signs of increased Vietnamese military preparations near China's southern border.

Africa, Israel, South Korea and Taiwan, are scheduled to begin Monday, with tourists paying \$225 for six and a half hours of sightseeing at three temples and a lunch be-

The journalists were restricted to the terminal of the nearby Siem Reap Airport for three hours after their morning bus tour as the Thais

The Khmer kings built at least three capitals on and around the Angkor district between the 8th

It was all but abandoned as the Khmer empire shrunk and Cambodians moved further a

The "Black Paper" also discloses that when President Nixon ordered the allied invasion of Cambodia, in 1970,

ans fled for shelter in office buildings. On one street, about 500 protesters set fire to a car and several piles of tires.

The workers made, but the strikers said the stoppage would continue until the shah abdicates.

The protest movement against the shah erupted in January, and far it has claimed an estimated

Today, Cambodia's chief concern appears to be whether its larger neighbor will let it continue to live as an independent state.

ed. He appealed to Moslem leaders who has urged the oil workers to walk off the job "to perform your duties and recommend that the strikers end their strike."

Mobs rampaging through Tehran yesterday had threatened Americans with death, set fires, smashed windows and immobilized traffic in the worst disturbances in the capi-

CAIRO, Dec. 27 (AP) — A collision yesterday between a passenger train and a bus south of here killed 9 persons and injured 25, the newspaper Al Ahram reported today.

1. *Chlorophyll a* (Chl a) is the primary photosynthetic pigment in most plants and algae. It is a green pigment that absorbs light energy in the blue and red regions of the visible spectrum. Chl a is essential for the light-dependent reactions of photosynthesis, where it converts light energy into chemical energy in the form of ATP and NADPH.

Journal of Management Education 30(6)

the 1990s, the number of people in the United States who are 65 years of age or older is projected to increase from 20 million to 30 million, and the number of people 75 years of age or older is projected to increase from 10 million to 15 million (U.S. Census Bureau, 1996).

Tarkenton Throws for 2

Vikings Overpower The Cowboys, 21-10

DALLAS, Oct. 27 (AP) — Fran Tarkenton, a master of the third-down play, dazzled Dallas with his brilliant play-calling and three touchdowns passes last night, leading the Minnesota Vikings to a 21-10 National Football League victory over the Cowboys.

The Vikings, struggling to retain their National Football Conference Central Division title, raised their record to 5-4. The loss knocked Dallas out of a first-place tie with Washington in the NFC East. The Cowboys now are 6-3.

Jittery Dallas committed two blunders in the first period and Tarkenton made the Cowboys pay with two touchdown drives.

Tarkenton hit Chuck Foreman with a 4-yard touchdown pass after Larry Brinson had fumbled away the opening kickoff. And he whipped the Vikings on a 37-yard scoring drive after Tony Dorsett had lost the ball on the next series. Ricky Young scored on a 4-yard run after Dallas' second turnover

and the Vikings led 14-0 midway through the first period.

The Cowboys' intricate offense finally got into gear in the second quarter with a long drive to the Vikings' 8-yard line, where a third-down Roger Staubach pass was underthrown. Rafael Septien drilled a 25-yard field goal, making the score 14-3.

Tarkenton's 12-yard touchdown pass to Sammy White with 29 seconds left in the second period gave the Vikings a comfortable 21-3 lead at halftime.

Tarkenton came out throwing again in the second half but the embarrassed Dallas defense stiffened and Staubach took control for a 63-yard scoring drive in eight plays.

Tony Hill ran 29 yards with a punt return and snared an 18-yard pass from Staubach to put the Cowboys on the Vikings' 1. Robert Newhouse barged across for the score at 5:03 of the third period and it appeared that Dallas was poised for a comeback.



Bob Tucker, Minnesota tight end (in dark jersey), takes Dallas safety Charlie Waters for a ride deep into Dallas' territory.

Olympic Gold Medalist Wins Men's Gymnastic Crown

STRASBOURG, France, Oct. 27 (AP) — Olympic gold medalist Nikolai Andrianov of the Soviet Union took the gold medal today in the men's individual combined exercises at the world gymnastics championships here with a score of 117.2. Eizo Kenmotsu of Japan won the silver medal with 116.55 and Alexander Ditiatin of the Soviet Union was third at 116.375.

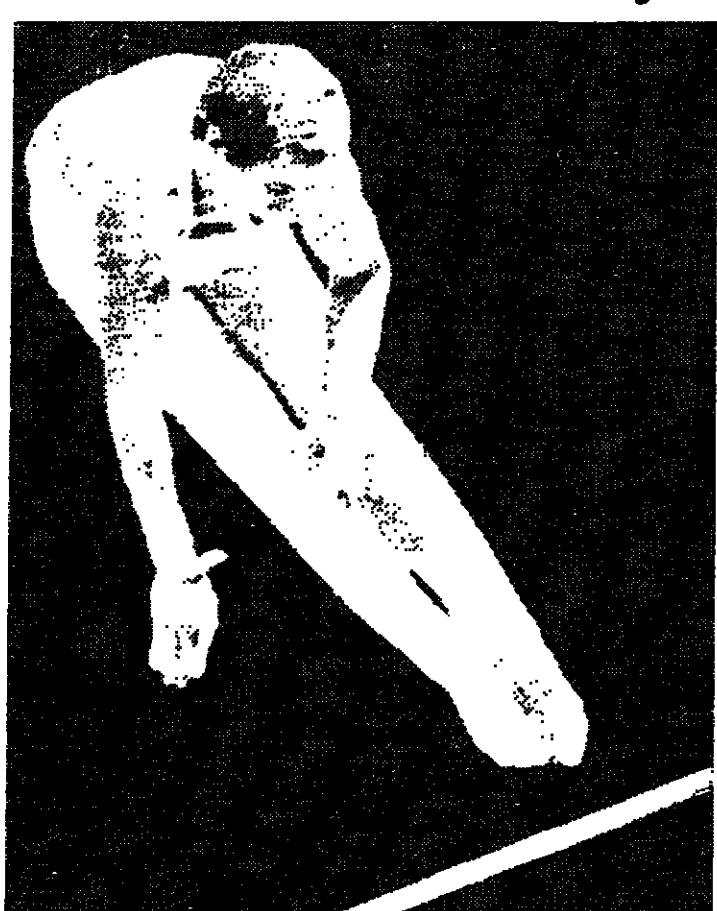
The Soviet gymnast, who earlier in the week seemed hopelessly error-prone, turned in a stellar performance, climaxed by 9.90 points on the rings and two 9.85s on the floor and vault exercises.

His performance settled speculation over his ability versus Japanese former world champion Shigeru Kasamatsu.

Kasamatsu missed the 1976 Olympics because of an operation, raising speculation that Andrianov's gold medal there was a hollow victory. But the Japanese placed only 7th here. [Reuters reported that Kasamatsu ruined his chances by falling off in the middle of his exercise on the pommel horse, a discipline that requires great control and strength.]

The other top placers were Eberhard Gienger of West Germany, fourth with 116.20, Hiroji Kajiyama of Japan, fifth with 115.90, and Kurt Thomas of the United States, sixth with 115.725.

Thomas showed his best in the floor and vault exercises, his traditional strong points, but garnered an unexpectedly low 9.50 in the rings.



Nikolai Andrianov of the Soviet Union arches over parallel bar during men's individual competition at gymnastics tournament.

finish in the top 10 was Bart Connor, who was ninth with 115.30.

his routine seemed to show some technical faults.

"I was so confident beforehand it was almost scary," Connor said. "Can you believe it? Two Americans in the top 10."

Thomas and Connor together were the driving force in lifting the U.S. squad's team standing from seventh in the world after Montreal to fourth here earlier this week.

Andrianov seemed confused at the award ceremony when some of the crowd of 8,000 whistled and booed. He said at a press conference afterward, "I didn't understand what the crowd was feeling."

Asked how he thought his chances were of retaining his Olympic title in 1980, Andrianov said, "I think the crowd will be a big help in winning in Moscow."

The only other American to get into the finals was Mike Wilson of Garland, Texas, who finished 20th with 113.80. He offered a spotty performance with scores ranging from a 9.80 on the floor to a 9.30 on the high bars, the lowest U.S. score of the night.

Connor moved with obvious assurance and impressive ease except on the high bar, where

NHL Standings

Continental Conference
Patrick Division

	W	L	T	Pts.	GF	GA
Atlanta	3	3	2	12	40	21
NY Rangers	3	3	2	12	38	16
NY Islanders	3	3	2	12	28	23
Philadelphia	3	3	2	12	28	22

Smitty Division

	W	L	T	Pts.	GF	GA
Chicago	3	3	2	12	35	12
Vancouver	3	3	2	12	33	37
St. Louis	3	3	2	12	35	44
Colorado	1	5	3	3	20	38

Wales Conference

	W	L	T	Pts.	GF	GA
Montreal	4	2	1	9	31	24
Detroit	3	3	2	8	25	22
Los Angeles	3	3	2	8	28	27
Washington	1	4	2	4	19	28
Pittsburgh	1	4	2	4	23	31

Adams Division

	W	L	T	Pts.	GF	GA
Boston	5	1	2	12	38	21
Toronto	4	4	1	9	25	28
Buffalo	4	4	1	9	25	18
Minnesota	1	2	4	2	12	19

Thornton's Results

	W	L	T	Pts.	GF	GA
Philadelphia	3	3	2	12	35	12
Los Angeles	3	3	2	12	35	12

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Broncos Hold Slight Edge Over Seahawks

By William N. Wallace

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NFL Weekend

By William N. Wallace

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Stalled Salt

How badly stalled is SALT II? The Russians have suddenly become suspiciously fussy over details and won't close the last few inches of gap which would permit the sealing and signing of the agreement, according to Secretary of State Vance's experience in Geneva last week. This means that Leonid Brezhnev will not be coming to Washington in January for the ceremonial conclusion of these long, complex and, as far as many Western commentators are concerned, unpopular accords.

Full recognition of the People's Republic of China by the United States and the visit of Deputy Premier Teng Hsiao-ping to President Carter in that same month of January is reported to be the reason for the Russians' stiffness. They have on the whole been non-violent in their reaction to this event, and Mr. Brezhnev's personal letter to Mr. Carter on the subject was even termed "positive" in Washington. Still, it cannot be easy not to show some kind of practical displeasure, and the SALT negotiations do offer that chance. Superficially, the Soviet position is that the time limit of the attached treaty protocol is not satisfactory, and there are other relative minutiae which they profess demand further tinkering with.

Disarmament treaties in general, and SALT series in particular, have proved ground for extraneous political issues all themselves upon. The Russians have SALT, along to fasten the kitchen sink, and it is including peace in the Middle East, what lever-natural they should want to rapprochement they have in Sino-American relations.

But if SALT II could be taken loose from such entanglement and negotiations, it would be seen to stand reasonably on its technical

merits. It does actually require the listing of some Soviet weapons, thus provides for factual arms control, thus reduces some of the potential for force projections. At the same time, the United States to continue its "strategic triad," with Cruise-missile, or a new land-based missile, with a new carrier, its support, stable strategic authority, that weapons developed States to respond to that there would be little likelihood of surprise.

There is, little chance that political issues alone thing, there is the argument that arms treaty should be concluded with the Soviet Union so long as it is engaged in military buildup around the world. It is not discourage, in fact it promotes, it is in the defense budget, while conservatives contend it gives too much away. It indicates that the United States is losing the ability to express its will to respond to new Soviet threats as they develop.

Even the personality of the news arms control director, Gen. George Seignious, is a matter of conflict, and this ties in directly with the struggle the administration will face when it presents the finished SALT treaty to the Senate for ratification some time in 1979. The best hope for SALT's ultimate success rests on philosophical, even psychological ground — simply that it is better to accept a disarmament agreement, some of whose associations may be unpalatable, than to reject it, if by rejection one surrounds oneself with associations which are even more unpalatable.

A Season of Discontent

For a time that is supposed to signify hope, Christmas 1978 may have seemed singularly somber for American foreign policy. Even the worldly reporters who travel with Secretary of State Vance were described as "stunned" when he and Soviet Foreign Minister Gromyko emerged from 20 hours of negotiations in Geneva to announce not an expected agreement on a strategic arms limitation treaty, but continued disagreement.

From Geneva, Secretary Vance shuttled to Brussels to meet with the Israeli and Egyptian foreign ministers and try to jump-start the engine of the Middle East peace talks. The effort was not immediately fruitful, and then in Cairo, President Sadat strongly criticized Prime Minister Begin in personal terms. He seemed to suggest also that many of the problems snarling the peace talks grow from a refusal by Saudi Arabia to give enough support to Sadat's initiative.

That was only one cause for gloom on the Saudi front. Despite President Carter's hard-fought battle to persuade Congress to permit the sale of the latest combat aircraft to Saudi Arabia, the Saudis joined in an unexpectedly steep increase in world oil prices that they could have mitigated. American congressmen were left to ask what they had achieved in return for a major change in weapons policy. In Iran, meanwhile, a principal opposition leader made brutally clear that a reasonable solution to that nation's crisis is going to be extremely difficult if not impossible to achieve; the opposition does not want to still the turmoil but to stir it until the embattled Shah Mohammed Reza Pahlavi is driven from the throne.

To balance all of this, there was Carter's success in overcoming the obstacles to full diplomatic relations with China. But while the terms of that agreement seem to be sound, many Americans feel disquiet about the treatment of the 16 million people of Taiwan. And despite Soviet denials, who can be sure that the China agreement did not make Moscow more stubborn on SALT?

What are Americans to make of the country's international fortunes or the Panglossian optimism expressed by the president on his mother-in-law's front lawn in Plains when he professed to be "not discouraged at all"? There is at least some basis for thinking that some of the president's hopefulness is justified. Taken on balance, it has been an extraordinary year for United States foreign policy.

There is not yet a SALT agreement; but it is nearer than ever. It is possible that the snags in Geneva represent little more than a mistaken Soviet belief that last-minute concessions could be wrung from a United States eager for agreement. Permanent stalemate does not seem inevitable in the Middle East; Israel needs peace; Sadat needs tangible results. And if the United States does not have enough influence in Saudi Arabia, it has many common interests that may yet improve the relationship that anchors Western security in the vital Gulf.

If President Carter was suggesting that patience is perhaps the greatest diplomatic virtue, he is right. Patience, and some ingenuity, will be needed to break the ice jams of December.

THE NEW YORK TIMES.

International Opinion

Troubles in Turkey

Seven years ago, Mr. Bulent Ecevit was one of the main critics of the use of martial law to crush left-wing disorder. Now after a year as prime minister he has finally been obliged to turn to the army himself. In theory, he is dictating policy to the army and in theory he should be able to do what he has to — that is to insure that the martial-law commanders chase those really responsible for the violence instead of concentrating on a witch hunt of the left of the sort which led to so much bitterness after Turkey's last experience with martial law. For the West it is a crucial period. Turkey's strategic position has

long made it important for NATO planners. Now with the present problems in Iran, stability in Turkey is all the more desirable. But so far the West — whether through its collective organizations such as the International Monetary Fund or as individual countries — has done little to meet the anguished appeals for economic and financial support from a government which has inherited a desperately indebted economy. As for Mr. Ecevit, his main problem is now to insure that the practice of martial law should fit in with theory. And he would be the first to admit how hard this could be.

— From the Financial Times (London).

In the International Edition

Seventy-Five Years Ago

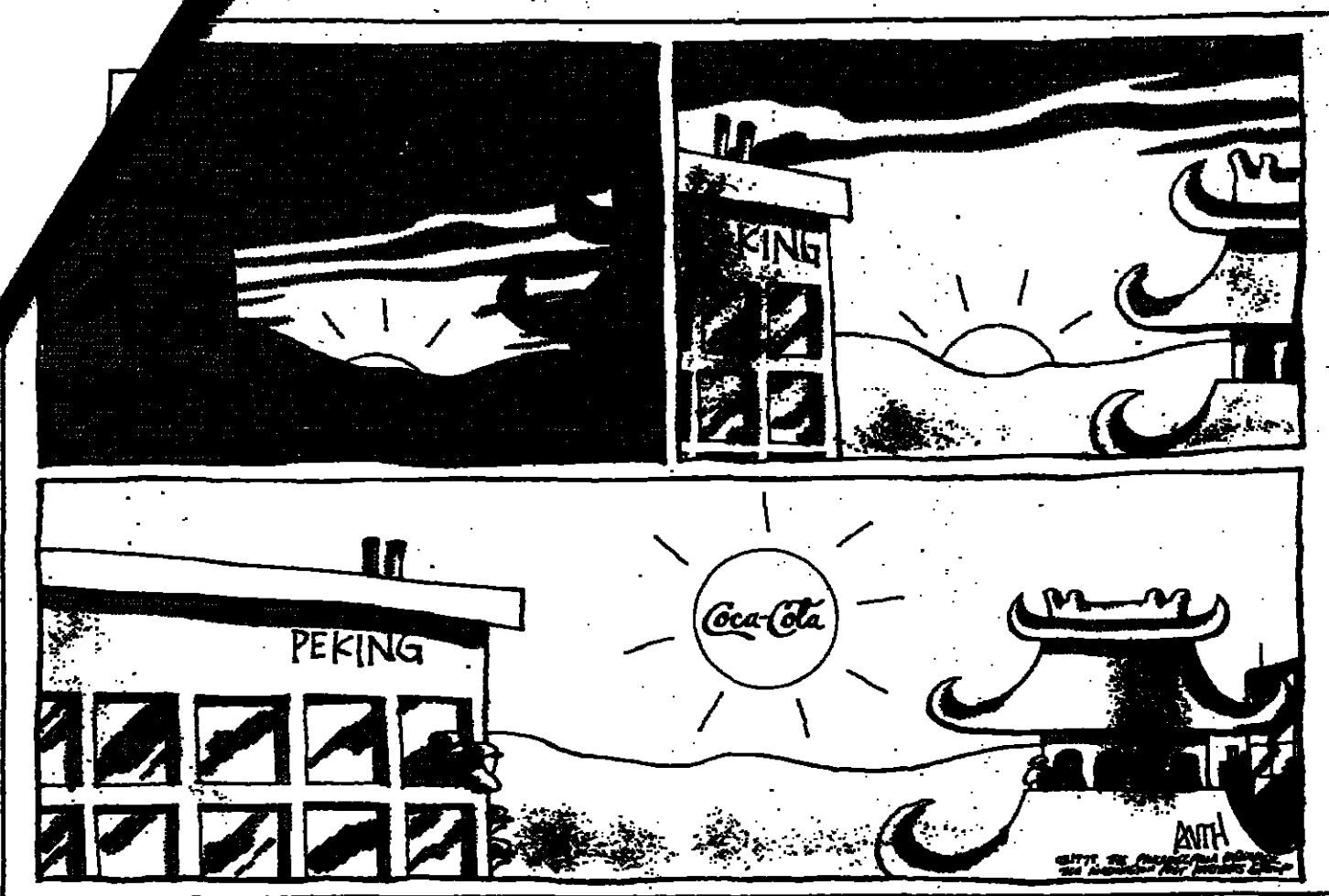
December 28, 1903

PARIS — A special line of investigation about which the medical profession is just now concerned is directed to the measurement of the pressure of the blood. The pulse has heretofore been the indicator of the strength of the blood currents, but now a long series of experiments has resulted in a more accurate mechanical device. The basis of the device is an inflated rubber bandage placed around the arm. One of the first results believed to have been reached is that alcohol is of less value than has been supposed in maintaining the life of fever patients.

Fifty Years Ago

December 28, 1928

PARIS — The ship carrying the main unit of the Byrd South Pole expedition, which includes airplanes to fly over the very pole itself, has finally reached the shore of the distant continent. The expedition radiocast back: "We sailed along the barrier all last night and this morning. Despite all we had read about this wall of ice, we found that no pictures or descriptions could convey an adequate impression of it. The ice rose eighty or ninety feet high: majestic, forbidding, beautiful and terrible. We plan to venture on it with skis tomorrow."



A Boomerang on China for the Kremlin

By Leopold Unger

BRUSSELS — The Kremlin is beginning to regret Mao Tse-tung. "The East wind has overcome the West wind," as the Great Helmsman predicted when the first Sputnik was launched; but there is no joy in Moscow, for since that time, geography has changed.

It was inevitable that the United States and China should normalize their diplomatic relations. Thus, the agreement to exchange ambassadors was more recognition of a de facto situation than an upsetting of the international apple cart.

A Reaction

Moscow must have been expecting some sort of reaction from the United States and China, since it has — for all practical purposes — absorbed five countries (Vietnam, Laos, Afghanistan, Ethiopia and Southern Yemen) in its zone of influence in the last few months. Obvious to all, including Moscow, Washington and Peking had to do something to stop the Soviet advance and to prevent the creation of an "Asian Cuba and Angola" in Vietnam.

The Kremlin also had known that China's long march toward the world — which started with Mao's pingpong diplomacy in 1971 — was leading to closer links between Washington and Peking. No one has watched this long march more closely than Soviet President Leonid Brezhnev, who was particularly attentive to this year's final sprint, which featured the "anti-hegemony" treaty with Japan and Chinese Premier Hua Kuo-feng's trip to Bucharest and Belgrade, in the Balkans, that uncertain underbelly of the Soviet Union. The U.S.-Chinese rapprochement is merely a logical consequence of that policy.

Nevertheless, Mr. Brezhnev would have preferred receiving a less historic Christmas gift from President Carter and Mr. Hua, for the "sentiment" behind the gift is more than geographic; it is political and economic.

Economic because a China with open doors represents a market

place that is as extraordinary as that of the Soviet Union but much more accessible. The road to the Soviet market is blocked by two obstacles: the Jackson Amendment that ties U.S. credits to Moscow to a more liberal Soviet emigration policy, and the regulations that seek to prevent Western technology from helping in the development of the Soviet arms industry.

These two obstacles do not exist for China. Peking has no emigration problem and its military development is not — for the time being — considered dangerous.

The United States is China's fourth largest trading partner, with total exchanges at \$1 billion. The establishment of normal diplomatic relations allows for a virtually unlimited increase of this trade.

Moscow remembers that the first result of the establishment of diplomatic ties between Tokyo and Peking was the conclusion of trade agreements amounting to about \$80 billion. Among these accords were contracts for five iron and steel complexes, worth about \$14 billion, which will enable China to double its steel production in a few years. That figure alone is only slightly less than the total aid allotted to the Third World last year by 16 of the most developed nations.

China's minister of foreign trade, Li Chiang, has declared that he is ready to sign long-term accords with the United States similar to those signed with Japan. Furthermore, these agreements would include the "most-favored nation" clause, which the United States does not allow to the Soviet Union because of the Jackson Amendment.

Faced with such an unpleasant outlook, the Kremlin is afraid that the increase of U.S. interest in China will mean less U.S. technology and finance made available to the Soviet Union. Moscow's warnings to the West (like the recent one in Sofia to an assembly of delegates from 77 Communist parties) against supplying weapons to Chi-

na was simply a rhetorical exercise. Washington's "Chinese hand," so roundly denounced by Mr. Brezhnev, was being played with credit cards more than with atomic bombs.

This is why, when meeting with Averell Harriman, Juanita Kreps, Michael Blumenthal and 350 U.S. businessmen in Moscow last month, Mr. Brezhnev, Premier Alexei Kosygin and the highest officials of the Foreign Trade Ministry insisted that it was vital to "repeal the Jackson Amendment and to put an end to "strategic" restrictions on trade.

Consequence

The second aspect of the "gift" to Mr. Brezhnev is political, but it is the obvious consequence of the economic involved. Paradoxically, while Mao was alive, all of China's diplomatic ploys to the rest of the world left the Kremlin unmoved. This was because China was a "paper tiger," and all its diplomatic initiatives exposed the ravages wrought by the "Great Leap Forward" and the "Cultural Revolution." Now, however, Mr. Hua and Teng Hsiao-ping are doing what Moscow fears most: They are modernizing both China's foreign policy and its internal regime. China is just beginning to create the means which it needs in its role as a major world power, in order to play that role fully.

The outlook is somber for Moscow. Although it would be too far-fetched to conceive of a Washington-Peking-Tokyo military axis, there can be no question but that the Chinese-Japanese agreements, the Chinese-U.S. agreements and the U.S.-Japanese accords complement each other and are inextricably linked. Thus, a new Far Eastern policy is being born for the United States, and any Kremlin notion of an Asian "collective security" pact — a long-sought goal — is last disappearing.

Moscow's policy of encircling China has boomeranged. The battle for Asia will continue, but from vastly different positions.

Mr. Brezhnev was certainly not overjoyed to learn that a few days before his visit to the White House, Mr. Teng — his principal foe in Peking — will be the guest of honor there. Of course, as an Eastern European diplomat said recently, nothing "would prevent Mr. Brezhnev from being in Taipei all the time and Teng in Washington." But on a more serious note, the Kremlin's hands are tied; if it does not want to play a three-cornered game with Washington and Peking, then it will have to get out of the game and watch the other two from afar. And if there is anything Moscow wants to avoid, it is having to fight on two fronts at the same time.

III and the head of a worn-out clique incapable of facing up to the daily challenges of exploiting the mistakes of the capitalist world, chief of an international coalition being torn apart by the Romanian dissidence, Mr. Brezhnev has had to accept a series of setbacks. But he has done so by trying to make believe that everything was going his way.

Thus, while giving Mr. Carter a solemn warning of his discontent by torpedoing the SALT talks at the last moment, the Soviet president sent what Mr. Carter characterized as a "positive" message on U.S.-Chinese relations.

For the Russians, who boast that they know the Chinese better than anyone, and particularly better than do the Americans, it is considered only a question of time before they gain the upper hand. "We'll also have a party on our street," a Soviet diplomat said to a Western colleague, consoling himself with this old Russian dictum.

While waiting for that day, Mr. Brezhnev also has a short-term plan. He will meet Mr. Carter and use all the charm and conviction he has left to convince the U.S. president that in this three-way game, all players are, of course, equal, but nevertheless, some are more equal than others.

A Sense Of Unease In London

By James Reston

LONDON — This has been an off holiday season in London. The streets are bright and the shops, with their inflated prices and new, inviting, festive signs, have been frenetically busy, but somehow it doesn't seem very merry.

More than 2,000 policemen on emergency duty are touring the fashionable West End in pairs for fear of Irish terrorists. Security guards check all parcels and handbags at department store doors. All suspicious cars or vans are worked over by the bomb squads, and while nothing much has happened, all this creates an atmosphere of uneasiness.

Meanwhile, the BBC was on strike for a couple of days before Christmas. There was a shortage of gasoline in some places for fear of a truckers' strike. Fog closed the main London airport at the height of the Christmas rush — otherwise all was well.

Look of London

Going into 1979, the 40th year since the outbreak of the last world war, London, despite its present troubles, still looks like an imperial capital. The restored Houses of Parliament with Big Ben gleaming in the tower almost look overgrown over business and labor alike.

St. Paul's Cathedral, bathed in soft yellow light, presides over the old city and, from the Waterloo Bridge at night, is superbly beautiful. The carolers still go to Trafalgar Square with its dancing fountains and its lovely background of the illuminated National Gallery and the spire of St. Martin in the Fields.

The prime minister's house seems almost deserted. There is a single policeman at the entrance to Downing Street and another policeman at the door of No. 10.

Inside, Prime Minister James Callaghan sits alone at the large Cabinet table and talks amiably about serious problems. He has just been giving "a curmudgeon" lecture in this room, he says, to the leaders of British industry.

Production too low, inflation too high. They were not doing enough to help, he insisted (but many more industrial plants were shut down or on short staffs for the year-end holidays than in the United States).

Critical of Unions

The prime minister was also critical of the unions and he showed a visitor one of his favorite Christmas presents: a scroll containing a speech by the head of the Amalgamated Society of Engineers to members of that union in 1851. "Let charity and wisdom guide you in your efforts," it said. The prime minister read this and other similar passages from the speech with obvious envy.

He didn't say he was looking forward to next year's British elections and he didn't indicate when he would call them, but he is obviously determined to prove that he can retain his office by the election of all the people rather than merely by the election of his party alone.

He did not minimize the problem. Labor had acquired its share of enemies in recent years, he said, and the economy was far from good. Also, the leader of the Conservative Party, Margaret Thatcher (Mrs. T, as he called her) might get a lot of support from voters who might just like to see what would happen with a woman prime minister.

Callaghan said he was eager for the meeting with President Carter. President Valéry Giscard d'Estaing and Chancellor Helmut Schmidt had been in the West Indies and were in Jamaica.

There were many things to talk about: the future of the alliance, for example. For the moment he said it seemed to be in "sludgy water" with no common sense of direction, "ideas but no ideas," no general ideas that could make it look up, no sense of adventure.

An Agenda

Also there were many specific problems to talk over, he said. SALT negotiations and their effect on the defense of Europe, the Israeli, Egyptian, Iranian and Rhodesian problems and the future of U.S. nuclear policy, among others. So saying, he went off to his official country house at Chequers not depressed by his troubles. At this year is perhaps typical of the British people — elaborately calm and better at managing trouble than in getting out of it. What really hurts here now is not the loss of empire so much as the loss of sense of community, of the common purpose that enabled them to survive the two world wars.

Letters

SALT Support

The article by Robert G. Kaiser of The Washington Post (IHT, Dec. 1) relating Sen. Jackson's recent critique in Lisbon of the SALT negotiations left a rather distorted picture of the proceedings and results of the North Atlantic Assembly's Lisbon meetings, according to many participants, and the rapporteurs of the two committees where the SALT negotiations were discussed in detail, Mr. Klaus de Vries of the Military Committee and Peter Cornier of the Political Committee, have asked that the record be set straight.

An amendment reflecting Sen. Jackson's approach and introduced by Sen. Hollings was approved by the Military Committee, but rejected by the Political Committee. The final text that emerged from the discussions was the text of the Political Committee, which rejected the key clauses of the Hollings-Jackson amendment. That amendment specifically argued that SALT had not constrained the growth of Soviet strategic forces and tactical nuclear forces.

The text of the Political Committee emphasized strong parliamentary support of the SALT negotiations, expressing concern that "an unrestrained strategic arms race between the United States and the Soviet Union would lead to a less stable and more dangerous world," stating that "the failure to conclude an acceptable SALT-2 agreement will seriously damage the detente process and will increase political and military instability and insecurity," and finally calling upon member governments of the Alliance "to support United States efforts to conclude a SALT agreement which is equitable, balanced and verifiable" and to seek further negotiations that will reduce strategic nuclear forces. After heated debate in the Plenary Session, the resolution won the overwhelming support of the Assembly.

Finally, no mention was made in that article or later of the numerous replies to Sen. Jackson from West German, British, Danish, Dutch and U.S. parliamentarians, who argued that the current SALT negotiations were not detrimental to European interests but would enhance the security of the West. Among these critical responses was the contribution delivered by Mr. de Vries during the Plenary Session, a point-by-point analysis that calls attention to the reasons why the SALT negotiations deserve and are receiving European support.

SIMON LUNN

Director,
Military Committee,
North Atlantic Assembly.
JOB DITTBERNER,
Director,
Political Committee,
North Atlantic Assembly.
Brussels.

A Wish for Iran

Reflecting the emotional and political polarization that characterizes Iran during its current crisis, much of Western reporting has concentrated either on the "opposition's demands" or the government's day-to-day tactics. I appeal to moderate Iranians and Iran's friends in the West to beset themselves from their present emotionally induced catastrophic paralysis and to assert a moderate centrist position.

There surely exist thousands of Iranians disgusted with the excesses that have characterized the past but exceedingly wary of the dangerous naivete of the vocal opposition. It is their responsibility to speak up now in order to preserve the benefits of the shah's regime, while reforming it in a way congenial to the opposition, who have so tellingly criticized it.

The failure at this critical juncture to stand up and be counted, and to exert their influence in favor of reason, will be judged very harshly by history. The relinquishment of the political debate to tanks in the street and to mob rule guarantees an extreme solution of one type or another. As those for

tunate enough to live in stable democracies know full well, liberty is not achieved easily, and once realized, is reversible. In Iran it must now be striven for, with perseverance but not with excessive fanaticism. The unity of Iran must be preserved while serious planning about a new strategy of economic development and the parallel pursuit of social justice goes forward. The moderate middle class must make its voice heard now if only to show that it is, in fact, ready for political freedom.

If the recurrent bloodshed is to be arrested, and the undoubted achievements of the past few years are not to be dismantled, or reversed, Iranians must become constructively involved in the future of their own country. Only then can we hope that perhaps in a year's time, in a month of religious significance to many faiths, peace and hope will have returned to the hearts of Iranians and their well-wishers.

SHAHRAM CHUBIN.

London.

Vigilance

The editorial "No to Civil Defense" (IHT, Dec. 16-17) makes us Europeans wonder just how far the masochism of Americans has gone now that they can say that advance planning for a country's civil defense capacity is "arrogant," "unfeeling," and "baloney."

History reminds us that in World War I, the ratio of military deaths to civilian ones was 20 to 1; in World War II, 1 to 1; in Korea, 1 to 5; and in Vietnam, 1 to 20. The anticipated ratio in a nuclear war is at least 100 civilians to 1 soldier.

This is why many countries, such as Switzerland, refuse to play ostrich by sticking their heads in the sand in the face of danger, but rather, as stated in one of the Swiss civil defense handbooks, attempt to perfect a "civil defense [aimed] at the protection, the rescue and the care of persons and the protection

of goods and property by measures intended for the prevention or mitigation of the effects of armed conflicts." The handbook adds, contradicting the thesis of the IHT editorial, that "by credible preparation for the fulfillment of its tasks, civil defense contributes decisively to discussion. Civil defense can render more difficult the aggressor's threat with death and annihilation. I.e., his attempted blackmail. Hence, our capability of maintaining our own political will and independence is improved."

As to media fantasies, the little red book of Swiss civil defense, which each home has received in French, German, or Italian, has the following statement: "The enemy will have begun, already in peace time, well before the launching of military operations, to attempt to weaken our resistance using all means available. Among these means: introducing doubt into our spirit by insidious propaganda, seeking to divide us, to win us over to his ideology. The press, radio, and television can undermine our will. Let us be vigilant."

MILAN BODI.

Geneva.

Ex-Convict Is Charged

Police Unearth 13 Bodies Under an Illinois House

KNOLLWOOD-PARK TOWNSHIP, Ill., Dec. 27 (NYT) — Cook County sheriff's investigators yesterday unearthed eight skeletons from the crawl space under the suburban Chicago home of a contractor, bringing the total found since Friday to 13.

The bodies were under the garage section of the near, three-bedroom, brick-fronted home of John Gacy, 37, who revealed in playing a clown at children's parties.

Gacy, twice married and twice divorced, once served 18 months in a low prison for sodomy with a teen-aged boy. He is being held without bail on charges that he murdered a 15-year-old youth from suburban Des Plaines earlier this month.

The body of that boy, Robert Priest, still has not been recovered, but investigators say that Gacy confessed, in a rambling statement following the discovery of the first three skeletons Friday, to strangling the youth and throwing his body into the Des Plaines River.

He also is said to have told investigators that he had killed as many

as 32 young men over the last four years after having sexual relations with them. He was quoted as having said he tossed the bodies of at least five others into the river but that most were buried under his house.

"Apparently he was telling the truth," said Sgt. Howard Anderson of the Sheriff's Department, who reported the latest grisly discovery. "He's changed his numbers somewhat — there could be 32, but there might be only 25. We expect to uncover three or four a day and we expect to be there for more than a few days."

"I think, when this whole thing is over, you may be witnessing one of the most horrible crimes of the century," said Dr. Robert Stein, Cook County medical examiner, who was working with investigators in their painstaking search for more shallow graves in the crawl space, which measures about 30 by 40 feet.

Sgt. Anderson said a thorough check of young men who had been reported missing in the Chicago area indicated that "there are sev-



John Gacy

en, eight or nine people from this area who could be under the house."

He said that no positive identification had been made as yet of any of the remains, whose decomposition had been hastened by time that was spread over them. "What we're uncovering is mostly skeletons," he explained. "It's impossible to make a sight identification."

In U.S. Test With Neutrinos

Beams Said to Relay Data Through Earth

By Malcolm W. Browne

NEW YORK, Dec. 27 (NYT) — Scientists from Western Washington University say they have carried out the first successful demonstration that neutrinos — little-known nuclear particles that have neither electric charge nor mass — can be used to carry messages through the earth.

To do so, the scientists say, they used a "telescope" of their own design, a beam of waste particles originating at the Fermi National Accelerator Laboratory, known as Fermilab, in Batavia, Ill., and passing through several miles through hills.

The leader of the group, Dr. Peter Kotzer, believes that the technique will eventually permit global communication even with deeply submerged submarines, by neutrino beams passing through the seas and the earth itself.

Naval Research

The United States Naval Research Laboratory has been conducting research along the same lines, because the problem of communication with submerged submarines has long vexed military commanders.

The Western Washington University group carried out its successful experiment after hauling its heavy and very sensitive equipment in a tractor-trailer truck from the Pacific Coast through a blizzard to Fermilab.

"We neither asked for nor received facilities from Fermilab," Dr. Kotzer said in an interview, "but we made use of their particle beam. We set up our neutrino telescope on a steady in a kind of parking lot near West Chicago, 4.1 kilometers (2.5 miles) from the source of the

particle beam at Fermilab. By the end of the week, we knew we had it. It was a wonderful Christmas present for us all."

Dr. Kotzer's group has for several years sought the funds needed for a full-scale neutrino communication experiment, in which the "sender" would be the Fermilab particle accelerator and the "receiver" would be in Puget Sound directly through the earth, 1,719 miles away. But the scientists say that Fermilab has been unwilling to spend the very large amount required for the equipment needed to deflect its beam into the ground at the correct angle for emerging in Puget Sound.

The Western Washington group therefore devised last week's experiment as a cheap alternative that could at least demonstrate the principle.

Detecting neutrinos poses staggering problems in itself, and the idea that neutrinos could actually be put to use has seemed beyond imagination possibility. Since neutrinos have no charge they cannot be measured electromagnetically, and since they have no mass they are unlikely to register their presence by colliding with matter.

But a tiny proportion of each flock of neutrinos does collide with atomic particles, causing little showers of secondary particles, known as mu mesons. The mu mesons collide with other matter to produce tiny sparks of light called Cerenkov scintillation. By measuring these little flashes, scientists can calculate roughly the number of neutrinos that must have been responsible.

"What we've done here at Batavia," he said, "was to set up three 550-gallon oil drums filled

with water, arranged in a line that coincides with the particle beam emerging from the Fermilab accelerator, which is on the other side of a large hill.

"Inside the drums are Cerenkov flash counters," Dr. Kotzer said. "Most of the flashes detected come from cosmic ray particles, which have a much higher energy than the neutrinos coming out of Fermilab's beam."

"But by spacing the drums about 17 feet apart in the line of the beam and comparing the time between flashes in the drums with the speed of the neutrinos, we were able to distinguish between the cosmic neutrinos and the Fermilab beam neutrinos."

The Fermilab accelerator produces a beam of positively charged protons which, during Dr. Kotzer's experiment, carried an energy of about 350 billion electron volts. The laboratory uses this beam for its own experiments, and the "used" particles then pass outside the facility where they are blocked by the hill from irradiating West Chicago.

But the protons hitting the backstop hill produce secondary showers of neutrinos and mu mesons which keep on going, without causing harm to human beings. It is this secondary beam of "particle garbage" that Dr. Kotzer put to use.

Dr. Kotzer plans to return to the experiment after the holidays. "We were terribly lucky," he said, "that our equipment survived the minus-34-degree-Fahrenheit temperature we encountered driving across Montana. We're even luckier that this experiment has succeeded so well."

Waverley Root

The Horrors of Hangovers...

PARIS — I am not gifted with clairvoyance, but I am prepared to put my reputation for prophecy on the line: On Dec. 31 next, barring the unlikely ultimate catastrophe, an appreciable proportion of the human race will be engaged with enthusiasm in seeing the old year out.

I am also willing to predict that on Jan. 1 next, an appreciable proportion of that appreciable proportion will be seeing the new year in and wondering whether it is really worth the trouble. As Dorothy Parker put it:

Drink and dance and laugh and lie low, the reeling midnight through. For tomorrow we shall die! (But, alas, we never do.)

Survival does not always seem certain as, on New Year's morn, we return to relative consciousness and bend all our depleted energies to the task of persuading the walls to stop revolving. "Oh, 'tis jesting, dancing, drinking, Spenser's heavy world around," as E. E. Housman ungrammatically observed, and they do, they do.

We may as well resign ourselves to the certainty that on New Year's Day millions of Americans will be suffering from hangover. — and millions of Germans from *Katerjammer* (cat walling), Frenchmen from *gueule de bois* (wooden mouth) or *mal aux cheveux* ("My hair hurts!"), and Englishmen feeling chippy or from suffering from hot coppers (something really should be done about the way the English mistreat the American language).

Sincere Ecumenism

All these diverse spirits, whatever tongues they speak, will be united in an instinctive and unsuspiciously sincere ecumenism — the search for relief from a condition of which Robert Benchley said, "There is no cure save death."

There are less drastic defenses against the hangover, of which the most effective is not to drink too much in the first place. This opinion is not unanimous. "Man, being reasonable, must get drunk," as Lord Byron, surely a reasonable man if there was one.

A fortune awaits the person who can produce a remedy for New Year's Ailment (which, it is rumored, occasionally occurs at other moments of the year), but no one yet seems to have achieved a sure-fire one.

The Italian bitters called Fernet Branca is presented modestly only as good for upset stomachs, but public rumor has it that the sort of stomachs it is particularly good at soothing are those that have been upset by liquor. Fernet Branca looks like ink and tastes like medicine, and I am personally intimidated by it even when in robust health. But I have seen it work.

At this point, you will be expecting a list of remedies for New Year's heebie-jeebies, either of the good health school (onion soup, sauerkraut juice), or such horrors as the English hot cider with ginger, in accordance with the theory of the hair of the dog that bit you, a phrase with the homely, rustic tang of folk talk, which as a matter of

fact seems first to have sprung from the pen of that pre-Elizabethan writer John Heywood.

I intend to abstain from this amusement, and instead will offer a trinity of rules which, if thoughtfully followed, may allow you to wake up on New Year's morning without a hangover — at the risk of being despised by those who detest the injustice implicit in any escape from this flail.

• Rule 1: Don't go to a New Year's party. Stay home with a good book. (Don't watch television; it may drive you to drink.)

• Rule 2: If you can't resist carousing, eat as much as possible with what you drink. The human body can eliminate alcohol with reasonable speed, but it shouldn't be overworked. Food in the stomach monopolizes some space along the gastric lining and filters the alcohol, slowing its access to the bloodstream. Besides, the time you use up in eating is subtracted from

the time you would otherwise spend drinking.

• Rule 3: If you must drink heavily, try to drink only the very best, no matter how much it costs your host. Alcoholic beverages of high quality do less damage, probably because nobody has dared tamper with the basic product and fill it full of what are called congeners — extraneous substances that can do more harm than alcohol and stay in your system after the alcohol has gone.

I twice had occasion to study this phenomenon in extreme conditions. On the first, a bus deposited me overnight at a hotel in the French Jura that was reputed to have the finest cellar in the entire region. I mentioned this fact to the manager and he led me downstairs. I must have tasted that night every wine of the Jura, including one bottle 80 years old, along with a few of its distilled spirits.

... and Alcoholism in France

By Harriet Welry Rochefort

PARIS (IHT) — It is 7 a.m., and I am sitting up with workers from the nearby Renault plant. Blue-overalled men down a third round of *vin blanc sec*. Clerks talk animatedly over their *café au lait* (coffee with a shot of rum or cognac). Drinking in cafes a custom? "An obligation," comes the reply. And if all of France's cafes were to be closed tomorrow?

"Revolution!"

For millions of French, the cafe is essential — a rendezvous for lovers, haven for the lonely, meeting place for friends. It is also a major backdrop for a particularly French tragedy: alcoholism.

Last July a law was passed enabling police to administer a breath-analyzer test at any time on French roads. That, plus a television/radio "Drink or Drive" campaign, may be the beginning of the end of what has been the look-the-other-way attitude of the French government.

National Illness

With alcohol held responsible for 40 percent of all France's road deaths; with one man in four and one woman in 12 suffering from alcoholism; and with 30,000 Frenchmen dying every year from cirrhosis of the liver, it is hardly surprising that *Le Monde* once labeled alcoholism the "national illness."

That illness is rooted less in the French race than in a mentality that clings to such reassuring adages as "a meal without wine is like a day without sunshine" and to Paster's famous designation of wine as the "healthiest and most hygienic" of drinks. (Paster happened to add "when used moderately" and was talking during a typhoid epidemic, when wine was obviously preferable to polluted water.)

France is the world's largest wine producer and is proud of it. Wine is one of the 295 items on the country's cost-of-living index. There are an astounding number of ways to

say "Bottoms up!" in French: One sets out to *prendre un pot, trinquer, s'en jeter un, or picoler*. There is *la tournée*, wherein everyone in a group has to buy a round of drinks; there is the *trou normand*, the customary shot of calvados as a mid-meal digestion aid.

Alcohol is omnipresent, and a large part of the population simply drinks too much. The chilling fact is that, at any given time, nearly 50 percent of France's hospital beds are occupied by alcoholics. But alcoholism is as touchy a subject in France as candid discussion of sex used to be in the United States. Says Marie Riboud of the Mental Hygiene Center here: "When people see a drunk, they laugh. But when they are confronted with someone who has the DTs, they want to run away."

Perhaps the worst part of the problem is that everyone is tired of hearing about it. Says French journalist Francois de Closets, "Information about alcoholism bores everyone. In France everyone is against alcoholism... and on the other hand, everyone is for alcohol." The Comité National de Défense contre l'Alcoolisme (CNDA) estimates that there are four million French men and women who can be classified as excessive drinkers. Yet often these people do not consider themselves as alcoholics.

"On the contrary," says Dr. Jean-Claude Coupart, a company doctor in Nantes, "drinking is firmly anchored in our tradition. When I hint to a patient that he or she may be an alcoholic, the reaction is always one of deep shock. For them, it is as normal as drinking a glass of water. It will take generations to change these habits."

French medical thinking is undergoing some changes of its own. Says Professor Daniel Perrin of St. Jacques Hospital in Nantes: "The attitude of doctors to alcoholics reflects the attitude of the general population. The reaction of the doctor is often one of intolerance



The session ended when the bus drew up in the morning to continue its way and I climbed aboard fully expecting to be smitten somewhere on the route. Nothing happened. I fell asleep after a while, which was normal, since I had neglected to go to bed the night before, but I woke up in the pink of condition.

My second experience was in Colmar, where I attended the annual wine fair. I was in the tow of an Alsatian wine-grower, and he did the ordering. It was another all-

night affair, complicated by the nonstop ministrations of one of the noisiest brass bands in the world. I felt fine the next day.

A similar experiment was tried on a national scale during the period of Prohibition, whose later part I spent in Paris, where the writ of the Volstead Amendment did not run. I was working for the Paris edition of the Chicago Tribune, which was obliged to concoct each year — according to newspaperdom's inviolable law that says such observances must be written about even if nothing interesting has happened — two stories about the New Year's celebration, one for France The United States, one for France The U.S. account ended variously, as the news would have it. But the French story, by house tradition, ended each year with the same sentence:

"There were no deaths from poison liquor."

Correction

In an article Dec. 12, it was erroneously reported that "the persimmon... is the closest approach in America to the plum, and Old World fruit which did not exist in America until the colonists imported it." In fact, there were plenty of American plums about and early settlers did import European plums, but only because they preferred them. As for the closeness of the persimmon to the plum — well, they both grow on trees.

— Winifred Root

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Page 6

...and the



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QATAR — 1978

Development Goals Are Tempered by Caution

Economy

Using Careful Approach For Planning the Future

By John Whelan

DOHA (IHT) — While this nation belongs to the oil-rich states, it is a poor cousin, in terms of Kuwait or Abu Dhabi. Its finances therefore require careful management to keep it in economic equilibrium in quest for a national infrastructure.

Faced with manpower shortages in this domain as in others, the government is aware of need to expand its small pool of trained administrators in order to ensure that financial policy is carried out correctly.

In his careful approach to planning Qatar's future, Sheikh Khalifa bin Hamad al-Thani has eschewed moves to try to attract to Qatar service industries springing up in other Gulf capitals. Instead, he opted for capital-intensive industries based initially on oil and mining on gas.

Qatar also had to start from scratch in building up its infrastructure: port improvements, a road network, the \$500 million project for desalination and power generation at Ras Abu Fonta, a program in housing, telecommunications and the country's first hotels.

Public spending in the next few years is earmarked primarily for industrial development in Umm Said, a new industrial city being built on the Doha peninsula.

More diversified expenditure is needed to resume as Qatar's planning capability evolves. "We lack a framework of planning, and sometimes there is poor coordination between different public services," a senior official says. In practice, all major decisions have been made through Sheikh Khalifa's office.

Qatar's staff more departments, they can be expected to deal more real development in the economy.

Wealth Distribution

Initially, in the aftermath of the price increase in 1973, this development spending was coupled with measures designed to distribute a share of the new wealth to the people.

The resulting construction boom has briefly overtaken the government's budget. The country's unemployment rate, which stood at 10 percent in 1977, when Qatar, along with the Gulf states, reacted against the overhauling of its economy with a deliberate slowdown.

An official policy statement has been made about Qatar's resistance to an economic slowdown. It is a statement that makes it so difficult to obtain statistics on Qatar's economic trends.

The cooling of the economy and its slower growth, however, is based on several clear developments.

Production was being projected on a trend to run at more than 40 percent a year. Today local bankers estimate it has been curbed to a manageable 15 percent.

Qatar's inflation threatened to be a disruptive social impact by the import of goods out of the country. The less wealthy Qataris, who actually imported a smaller amount of goods last year than in 1977, are even more affected by the inflation, which has pushed the figures for imports up to \$12 billion.

Qatar also has faced a revenue problem. Its public revenue, in constant 1974 dollars, amounted to \$2 billion in 1977, down from \$2.2 billion in 1974 immediately following the oil-price rise.

Qatar's oil production has become more of a soft oil market has been in production, which fell off by 10 percent last year. Exports of oil are still expected to represent 95 percent of the country's national product.

Aid Cutoff

Qatar's dependence on oil has been a problem for the country, which had to back out of a position when it tried to demand a premium for its low-sulfur oil. The petroleum companies were able to resist the pressure and Qatar was in no position to demand until its demands were met.

economic slowdown and growing official prudence is its cutback in foreign aid. In its first years of independence, Qatar gained a reputation for generosity in dispensing official handouts — perhaps a manifestation of this country's thirst for recognition.

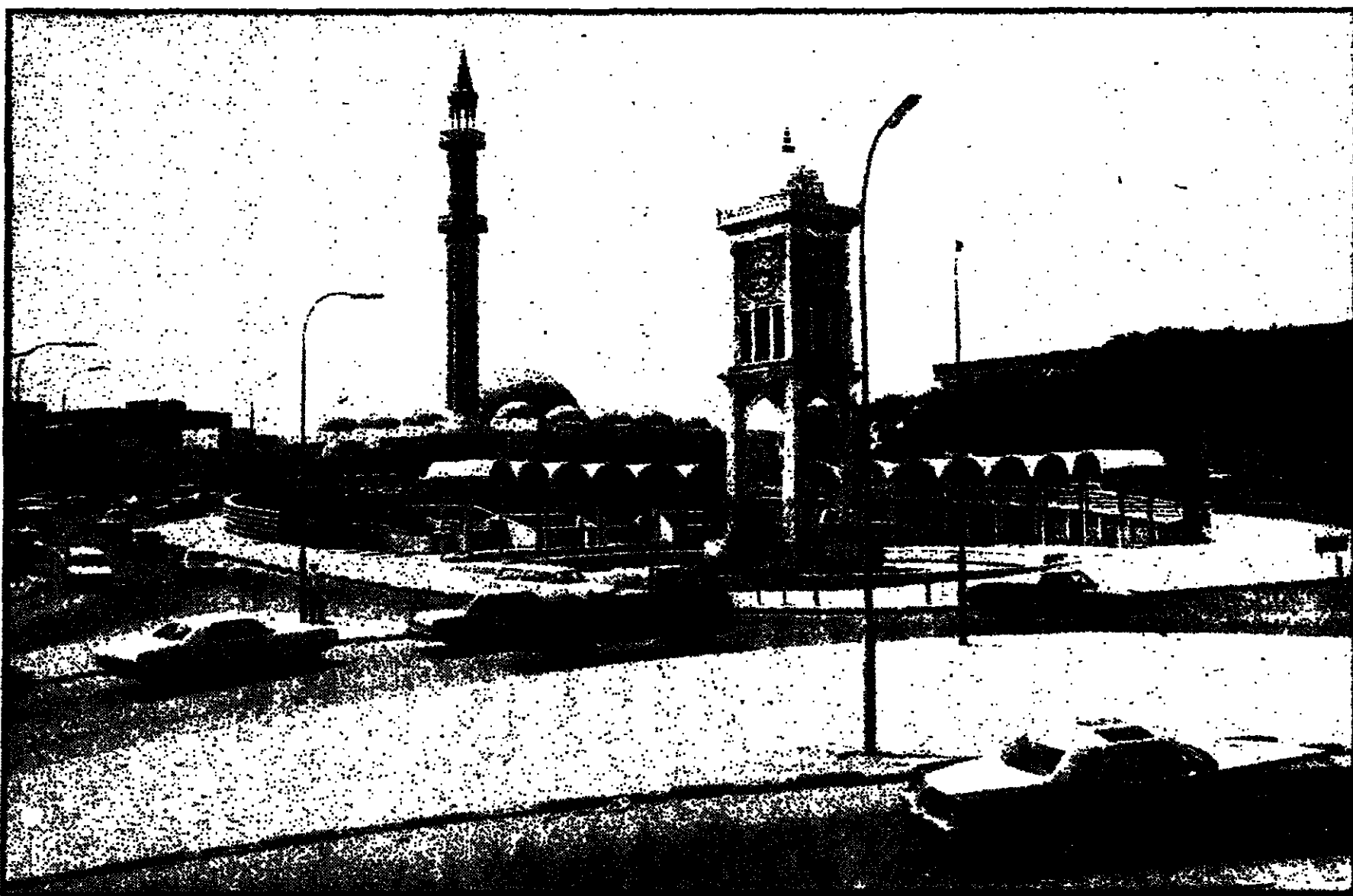
Nonetheless, Qatar is continuing to give away at least 10 percent of its income. The exact list of recipients is not divulged, but the prime beneficiaries have been other Arab states, and much smaller amounts go to Moslem developing countries.

Like other Gulf states, Qatar is trying to pool much of its aid, using multinational set-ups to avoid bilateral aid discussions. Qatar is part of the Gulf Organization for the Development of Egypt, which has been supporting President Anwar Sadat. Qatar now must examine how to balance this commitment with the calls of the Baghdad summit for a cut-off in aid to Egypt and increased support for other Arabs.

As for Qatar's domestic economic policy, imports and retail sales remain the most important form of business.

Shopping got a spectacular boost from the recently opened Doha Center, the Gulf's first shopping mall offering a range of goods much like a luxury Western department store's. A line of fresh and frozen European delicacies is flown in regularly and there is even a weekly charter flight bringing food from the U.S. West Coast. The shopping center — which carries consumer goods from cameras to

(Continued on Page 2)



Royal mosque and emir's palace overlook main square in Doha.

Catching Up Main Task For Nation

By Joseph P. Felt

DOHA (IHT) — Viewed from the air, Qatar has the general appearance of a peninsula — flat and tan with brown patches. The bleak landscape offers no clues for farming, no natural harbors for trading.

Its harsh environment is the simplest explanation of why Qatar, the smallest independent Gulf state, has experienced the slowest development takeoff of all the oil-rich Gulf states. Before the discovery of hydrocarbons beneath its sand and sea, Qatar supported only a small, poor population that had scant contact with the outside world.

This peninsula jutting 100 miles from Arabia into the Gulf remains the region's smallest, least-known state. Qatar became independent in 1971 at the breakup of Britain's protectorate in the Gulf and began modernizing in earnest in late 1972 when the present ruler, Sheikh Khalifa bin Hamad al-Thani, took power in place of his less forward-looking cousin.

The price of a late start is that Qatar crossed the threshold into being independently wealthy with less infrastructure than its neighbors. The nation has a critical lack of trained manpower, and this remains a bottleneck for development.

Qatar can afford a comparatively slow start, however, because of its gas reserves, which are expected to last a century and which offer the prospect of sustained growth for Qatar long after the region's oil is depleted.

At present, modernization is the overriding political issue for Qatar's leadership: How to stimulate it, how to control it to prevent any disruptive results.

Major Assets

Among the Gulf states, Qatar enjoys several major assets: A high per capita income; expectations of a durable energy export; natural, defensible borders; and a political elite dominated by a single ruling tribe, the Al-Thanis.

On the other hand, acute problems confront the nation today: A tiny population base (some estimates put the number of native-born Qataris below 50,000), few skilled people and no known natural resources except for hydrocarbons.

Qatar's ruler, making a virtue of necessity, has described his country's slow pace of change, due largely to the manpower shortage, as prudent development based on careful decisionmaking.

This cautious approach has enabled Qatar to avoid some pitfalls — for instance, the urban sprawl and poor quality construction in some neighboring emirates' boom towns. It has encouraged Qatar to experiment with some innovative planning — for instance, a management team is at work attempting to overhaul the archaic administrative structures and devise a decision-making process adapted to Qatar's special circumstances.

Besides the cautious tempering of its hard-working Sheikh Khalifa, Qatar's conservative approach is dictated by the unavoidably slow pace of developing human resources to cope with change. The first wave of educated Qataris is only returning home now to take up responsible jobs in its modern sectors.

In foreign policy, too, Qatar's options are determined by the same constraints — security and simplicity.

Saudi Arabia

In practice, Qatar is generally oriented towards Saudi Arabia, its giant neighbor. The exception proving this rule occurred when Qatar briefly sided against Saudi Arabia in 1977 during the Organization of Petroleum Exporting Countries' short-lived two-tier price system. Qatar's solidarity with the OPEC majority on that occasion was largely due to protocol because Qatar was the host country for the OPEC meeting. Qatar's real "little brother" relationship with Saudi Arabia was shown by the fact that Qatar brought in Saudi troops to handle the extra security duties.

Normally, Qatar's alignment with Saudi Arabia is unshakable.

Enough Oil for Decades, Natural Gas for a Century

By Ian Seymour

NICOSIA, Cyprus (IHT) — By world standards, Qatar's oil production is modest: a mere 0.8 percent of world output and 1.5 percent of the total in the Organization of Petroleum Exporting Countries (OPEC).

But for a nation of Qatar's small size and population, it represents a comfortable level of output that should last through the next two decades. Even then, there should be no cause for worry, for Qatar also has vast reserves of natural gas. Although crude oil is cheaper to export and more profitable to export, the gas could assure the country's energy needs for a century, covering both local consumption and substantial exports.

At present, Qatar's allowable crude oil production stands at 475,000 barrels per day (bpd) — 250,000 bpd from the various offshore fields (Idd al-Shargh, Maydan Mahzam and Bul Hanine) and 225,000 bpd from the Dukhan field onshore. In addition, Qatar gets a small net production of 5,000 to 10,000 bpd from a minor offshore field known as Bundugh whose output it shares on a 50-50 basis with Abu Dhabi.

Conservation

At current prices, oil revenues from this level of production would work out at around \$2.15 billion annually, yielding a per capita income of \$10,750 for each of the country's 200,000 inhabitants. (Actual oil revenues for 1977 were \$1.99 billion on a somewhat reduced production of 444,600 bpd.)

Production under the government-imposed ceiling (the so-called allowable production) of 475,000 bpd is substantially below the installed capacity of the production and export facilities that could probably operate at something like 600,000 to 650,000 bpd. The peak of actual production was reached in 1973, before the existing limitations were introduced, with an average of 570,000 bpd.

This gap between production capacity and the allowable ceiling on actual output is the result of the government's concern over the conservation of its natural resources. Thus, the government has sensibly opted for a production plan that emphasizes longevity of reserves rather than maximum current output.

Experts estimate that on existing proved oil reserves of 5.6 billion barrels, the present level of production could be maintained for a little more than 20 years before going into a decline that would reach depletion about 15 years later. This profile could be stretched out through the discovery of new reserves and/or enhanced recovery from the existing reservoirs; but no significant oil discoveries have been made in recent years, and the prospects for exploration are not considered promising.

However, some exploratory drilling in Qatar's offshore areas is being undertaken by the marine divisions of the state oil corporation and the West German company Wintershall.

In the mid-1970s when new arrangements were being negotiated between host governments in OPEC and the international oil companies, Qatar had the choice of opting for a 100-percent state take-over of oil operations (as, in their various ways, Iraq, Iran, Kuwait and Saudi Arabia), or leaving the companies with a minority equity participation in the producing ventures (like Abu Dhabi and Libya). Qatar opted for a 100-percent take-over on the basis of negotiated settlements with the former operating companies.

Providing Services

The entire oil and gas industry in Qatar is thus controlled by the government via the state-owned Qatar General Petroleum Corp. (QGPC) and its subsidiary the Qatar Petroleum Producing Authority (QPPA), which has divisions for onshore (ex-QGPC) and offshore (ex-Shell) operations.

However, the former concessionaires are continuing to provide wide-ranging managerial, technical and operational services, for which

the companies are paid a basic fee of 15 cents on each barrel of crude oil and gas liquids produced. This fee is subject to escalation in line with changes in the government's official selling prices for crude oil and on this basis has already risen to about 16.7 cents a barrel. For its part, Shell is also entitled to additional payments — the size of

which have never been disclosed — for services connected with oil and gas exploration and appraisal as well as offshore technology.

As for marketing, about 58 percent of production, or 275,000 bpd, is sold to the former concessionaires under five-year contracts — 130,000 bpd to the QGPC group and 145,000 bpd to Shell. The rest is

marketed directly by QGPC to third-party customers, including Gulf Oil (25,000 bpd), U.S. Shell (25,000 bpd), Charter Oil (30,000 bpd), Mitsubishi (40,000 bpd), Sumitomo (25,000 bpd), Petrofina (18,500 bpd) and Union Rheinische (13,000 bpd).

Qatar's crudes are fairly high-quality light oils with relatively low

sulfur content by Gulf standards. The onshore Dukhan crude shipped from the Umm Said terminal commands an official price of \$13.19 a barrel and marine crude from Halul Island \$13 a barrel — respectively 49 cents and 30 cents above the Saudi Arabian light "marker" crude at \$12.70 a barrel.

Marketing problems caused some headaches in 1977 and the early part of this year owing to general oversupply. But in the last few months the market has turned around. For one thing, the supply of light crude has been cut back significantly as a result of production limitations imposed in Saudi Arabia; for another, general demand has picked up sharply in the last quarter of this year. And now the market has been even further tightened to a near-stranglehold by the Iranian supply crisis.

Local Needs

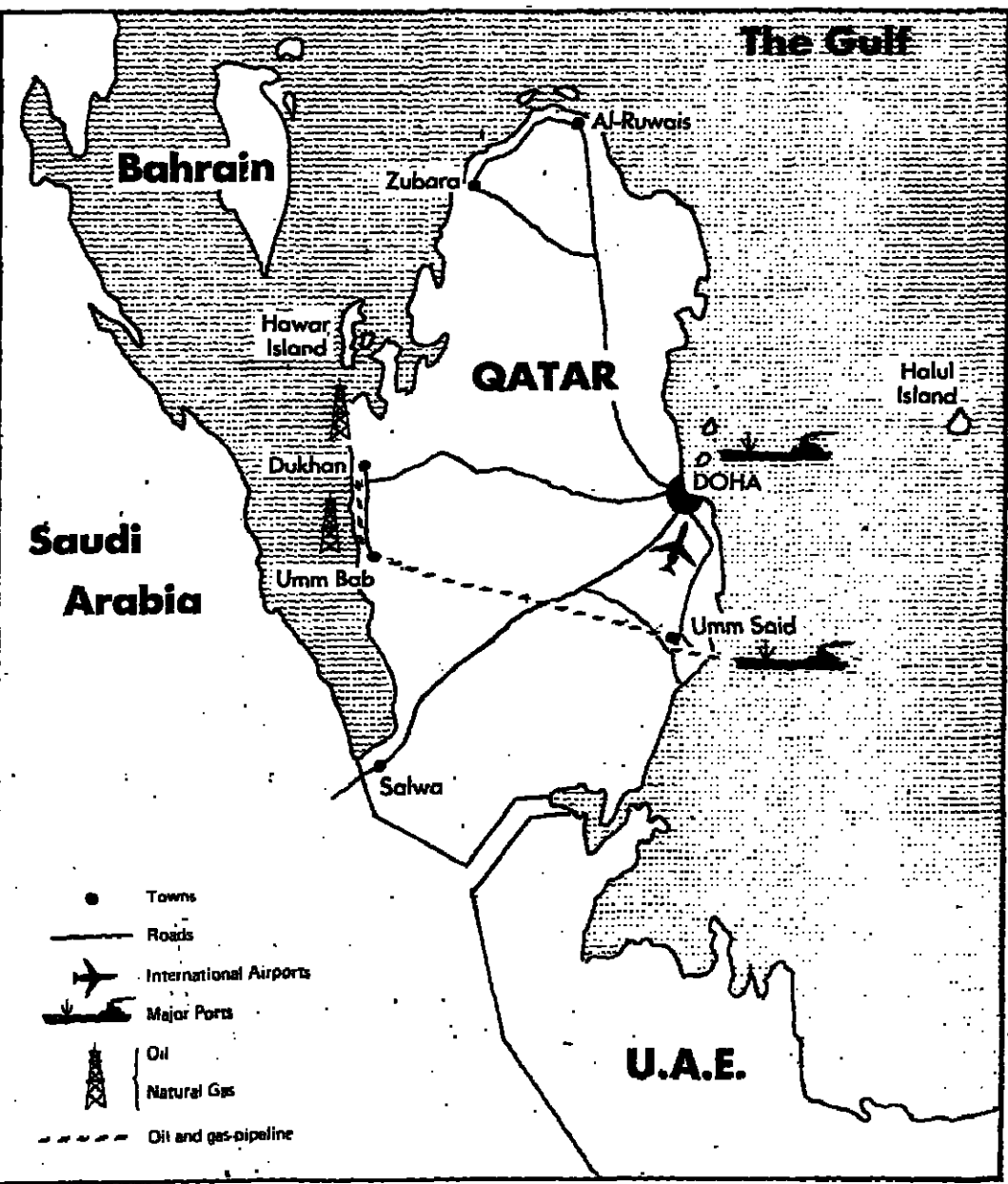
As well as marketing internationally, the state corporation has handled the requirements of the local market for many years. A refinery at Umm Said has a rated crude oil distillation capacity of 9,700 bpd, but it is no longer capable of fully covering the local market, which is mainly for lighter products such as gasoline and middle distillates. Last year, refinery output at 6,100 bpd was 14 percent below local consumption of refined products at 7,200 bpd. The balance had to be imported. As a result, plans are being drawn up for the construction of a new 50,000-bpd refinery to meet the country's projected needs up to 1990.

Although in the short and medium term, oil will continue to be the mainstay of Qatar's economy, in the longer term the emphasis is likely to switch more to gas as oil output declines. Meanwhile, gas is already being widely used as a fuel and feedstock for domestic industries, as well as for the production of gas liquids for export, and big expansion plans lie ahead.

At present, gas projects are directed mainly towards utilizing associated gas — gas produced in association with crude oil that has to be flared off if no use can be found for it. Such gas is subject to depletion with the crude oil.

In the long term, the future of Qatar's gas rests with an enormous offshore reserve of nonassociated

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Catching Up After Delayed Start Is the Main Political Issue

(Continued from Page 1)

Besides their normal community of interests, Qatar is now completely surrounded by Saudi Arabia due to recent border adjustments that eliminated the old frontier between Qatar and the United Arab Emirates and left a Saudi corridor between the two.

Qatar feels comfortable with a concept of Gulf security based on the primacy of Saudi Arabia as the leader of an unofficial Arab bloc of states on the Gulf's western shore. There is close (although unpublished) coordination on internal security, the main perceived threat.

In the military field, Qatar's own small armed forces, which contain few Qataris as yet, are awaiting delivery of U.S.-made Hawk missiles and French-made Mirage F-1 fighters. Qatar participates with Saudi Arabia in the Arab Organization for Industrialization. Like other small Gulf states, its defenses are aimed at maintaining internal order. For defense against an outside aggressor, it depends ultimately on the larger international powers like Saudi Arabia and, in the final analysis, the United States, to maintain regional stability.

Dispute

In Gulf diplomacy, Qatar has only one major preoccupation: the spitting dispute with Bahrain over the uninhabited Hawar Islands. While none too close with its other neighbor, the United Arab Emirates, Qatar has had better relations with the Emirates since the death of the former Qatari leader, who had gone into exile in Dubai.

In general, Sheikh Khalifa maintains a steady commitment to Gulf cooperation. Gulf Air is actively promoted by Qatar, and the ruler has repeatedly proposed a Gulf monetary union and other forms of close economic integration.

Qatar is all the more at home in the Saudi orbit because the nation is the only other state whose citizens are predominantly Wahhabi Muslims. The strict Wahhabi practices are applied less rigorously in Qatar, but the conservative Islamic interpretation remains the Qataris' main value system and helps cement Qatar's allegiance to Saudi views.

Qatar ties to Saudi Arabia also date from the origins of the ruling Al-Thani family, which migrated to Qatar in the 18th century from Saudi Arabia. Today, the Al-Thani family numbers an estimated

20,000 people — including several hundred men entitled to the rank of sheikh. This clan dominates Qatar by its status and also by its sheer size.

Key Posts

Saudi support for the Al-Thani family has been a factor of stability. And Saudi views have been influential in resolving internal crises in the Al-Thani family. For instance, the family decided in 1972 to remove the former ruler because of accusations of profligacy and give the throne to Sheikh Khalifa.

The succession question in Qatar — potentially a dangerous issue because it is the only problem ever likely to split the ruling family — was settled for a new generation last year when Sheikh Khalifa's eldest son, Sheikh Hamad al-Thani,

the armed forces' commander-in-chief, was named crown prince. Like other Gulf ruling families, the Al-Thanis hold most key posts in the government and also maintain a network of local authority throughout the country.

Every adult male in the Al-Thani family receives regular cash stipends amounting to \$10,000 monthly, in some cases. Despite their reputation for wild behavior in Europe in past generations, the Al-Thanis have become much more

responsible about their use of Qatar's power and resources. The ruler is known to feel that the next generation of Al-Thanis should rely less on stipends and, instead, be forced to use their talents — just like younger sons in

aristocratic families in Britain in the past.

Sheikh Khalifa makes a conscious effort to marry the traditional and the modern. Twice a week, he is accessible to any Qatari at his early-morning majlis, a kind of informal court where he receives petitions.

Arriving from villages or from offices elsewhere in the palace, the ruler sits in a long hall with 200 armchairs along the walls. Traditional retainers serve bitter bedouin coffee and waft refreshing

incense on the gathering until Sheikh Khalifa arrives. For an hour or so, he listens to petitioners, who trade places at his side, sometimes for a whispered word to report on an item of government business. Sometimes with a written note explaining some family problem, the secretaries note Sheikh Khalifa's orders.

A similar majlis is open to Al-Thani relatives. The majlis is an institution enabling the ruler to keep in touch with developments in Qatar. In addition, Sheikh Khalifa constantly pops up unannounced to inspect construction sites or find out why oil pollution has suddenly appeared offshore.

Reflecting his way of taking a direct role in affairs, Sheikh Khalifa tends to serve as a personal planning bureau for Qatar. Everything — including checks worth more than \$25,000 — has to be funneled through his office.

A degree of delegation is the next hurdle in the modernization process that he has nurtured so far.

Generation Gap

The other looming challenge is the generation gap between middle-aged Qataris and the younger people who have grown up in the shadow of the oil pump. "There are five centuries of history between a distinguished religious judge and his son who has a Ph.D.," a Western diplomat pointed out.

This accelerated pace for change, especially combined with the notion that money can be acquired without any need to work for it, liable to be a growing problem, especially after the top jobs are filled and only less prestigious jobs are open to returning graduates.

Qatar has been anxious to put itself more firmly on the map as an independent, and this thirst for international recognition even has caused the Qatar government to subsidize the costs of foreign embassies in Doha in the early days of independence. At the time, any hint of foreign recognition was seen as additional support for the independence and security of the fledgling country and new regime.

Already, quest for recognition is evolving into a quiet pride. Qatar's own identity, and so, planners hope this growing national motivation will help the country to bridge the generation gap and smoothly surmount the next phase of growth.

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Oil Enough for Decades, Natural Gas for a Century

(Continued from Page 1)

gas that can be left until needed. There are other substantial reserves of nonassociated gas in the Khuff formation under the oil-producing formations in the Dukhan onshore field. These are already being developed for industrial purposes.

Qatar's plans for its gas received a severe jolt in April, 1977, when an explosion and fire emanating from a pressurized propane tank destroyed key installations — notably the entire tank farm and fractionation plant — in the country's first natural gas liquid (NGL) project, called NGL-1, at the port of Umm Said. Completed in 1975, the system was designed to use 400 million cubic feet daily (cfd) of gas (250 million cfd associated and the rest nonassociated) from the Dukhan oilfield.

'Tail' Gas

After extraction of the NGL (propane and butane, collectively known as LPG — liquid petroleum gas — plus natural gasoline), the dry "tail" gas (mainly ethane and methane) is pumped for use as fuel and feedstock in the Umm Said fertilizer plant and as fuel for the Doha power station and Umm Bab cement plant. Prior to the "blast" production of associated gas from Dukhan averaged 245 million cfd, of which 60 percent was utilized and the rest flared.

The destruction of the NGL-1 facilities halted gas liquid exports, but gas deliveries for industrial purposes have continued normally. Meanwhile, a contract has been awarded to Japan Gasoline Co. to

rebuild the NGL-1 installations. The project should be completed by 1981 and will have a daily capacity of 1,200 tons of propane, 750 tons of butane and 450 tons of natural gasoline.

Pipeline Network

At the same time, a \$450 million project — known as NGL-2 — is under way to extract and export

NGL from gas produced from the offshore oilfields. This is now scheduled for completion in the second half of 1979. Under contracts totaling \$350 million, Japan's Mitsubishi Heavy Industries is the prime contractor for the gas gathering and compression installations at the fields, while Saipem of Italy is building a \$23 million pipeline to convey the liquids to Umm Said.

Mitsubishi and Chiyoda of Japan are constructing a \$70 million fractionation plant at Umm Said that will have a daily capacity of 1,100 tons of propane and 900 tons each of butane and natural gasoline. The facilities are designed to handle up to 360 million cfd of feed gas from the offshore oilfields — around 200 million cfd of associ-

ed gas and the rest, if necessary, from nonassociated formations.

Another major gas project now nearing completion involves laying a new pipeline network with a capacity to deliver 600 million cfd of nonassociated gas from the Permian Khuff formation underlying the Dukhan oilfield to industries in the Umm Said area — notably the \$500

million electric-power generation and desalination complex at Ras Abu Fontas and the \$280 million iron and steel plant that was completed earlier this year.

Finally, there is Qatar's as yet unplayed trump card in the energy field: a huge offshore gas reservoir (also located in the Permian Khuff formation) north of the Qatar Peninsula, which is known simply as the Northwest Dome. Discovered by Shell in 1971, this is one of the world's largest gasfields. Reserves are estimated by Qatar authorities at about 80-100 trillion cubic feet, in calorific value, this represents the equivalent of 15-18 billion barrels of oil — roughly three times Qatar's existing proved reserves of oil.

QGPC and Shell have been engaged in preliminary studies of a \$3 billion project to produce and export some 1.2 billion cfd of liquefied natural gas (known as LNG; this involves a costly cryogenic process to liquefy the methane and ethane components of the gas as well as the NGL).

However, the plan is more or less dormant at the moment and is likely to remain so for quite a while. With energy prices at current levels, the economics of exporting LNG are poor: The capital cost is enormous and the returns to the producing country amount to only about \$2 per barrel on LNG as against, say, \$12.50 per barrel for oil.

Under the circumstances, it makes sense for the Qataris to regard their offshore gas reserves as "energy in the bank" for future generations.

Careful Approach in Economic Planning

(Continued from Page 1)

automobiles to fashions — has made shopping "the main cultural activity" in Doha, a diplomat said.

The import field is dominated by large trading families. Among the leaders are members of the ruling Al-Thani family itself. The shopping center, for instance, is the brainchild of an Al-Thani family member, who intends it to be the core of a recreational center in Doha, the first of similar projects in other population centers in Qatar.

Other prominent trading firms include the Manai family, distributors for General Motors, who are building a big maintenance garage to provide after-sales service, and the Darwish family, who dominate the business community here a generation ago and now are making a comeback.

The business interests of these powerful merchant families range

from powerboats to chewing gum. The families can be expected to follow the pattern of merchant clans in other Gulf states. They will gradually develop from simple importing to entrepreneurship in light industry as the Qatar government starts to support local manufacturing.

The pattern of imports at present is shifting to favor U.S. goods. Although local statistics are limited, Japan and Britain appear as Qatar's main suppliers, but the U.S. figure of \$120 million is higher — and probably the top — if it includes other items trans-shipped via other Gulf states.

Few Banks

In the service sector, Qatar is just beginning to develop — a slow start dictated largely by the lack of personnel. Qatar's banking system is still relatively simple. Its 12 banks are few compared with Oman's 20,

the 50 in the United Arab Emirates and 80 in Bahrain. The 12 banks include two Qatari banks, five regional banks, three British, and a French and a U.S. bank.

The Qatar National Bank (which is half-owned by the government) handles the government's commercial business and holds most of its short-term deposits. It is the only bank in Doha operating on any scale in the Euro market.

This is one of the few Gulf states that taxes bank profits: Once bank profits top \$1.2 million, the government takes up to 50 percent.

The Qatar Monetary Agency, perhaps the least developed of the central banking authorities in the Gulf, started operating a clearing house this year. Previously, banks had to send messengers to clear checks.

Controls on spending and accounting procedures have improved. Public bidding has been

introduced for government contracts. The government's tender board is obliged to justify any refusal to accept the lowest bid.

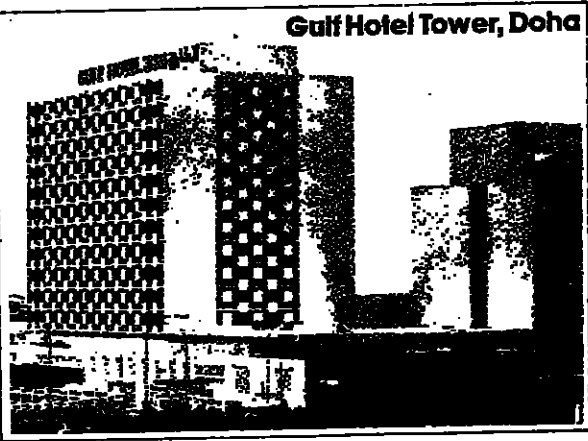
As banking practices catch on, the old habits of hoarding cash are slowly dying out. But the most popular banknote is still the highest denomination, worth about \$130, apparently because it is handy for stashing away.

A more recent habit, real estate speculation, has been badly squeezed by government policy. Merchants continue to finance real estate purchases by adroit manipulation of their business credit lines, but loans for property finance have dried up. Even the Qatar National Bank, which used to operate a special fund of soft loans for Qataris, has had to foreclose. "We have all suffered," a European banker said.

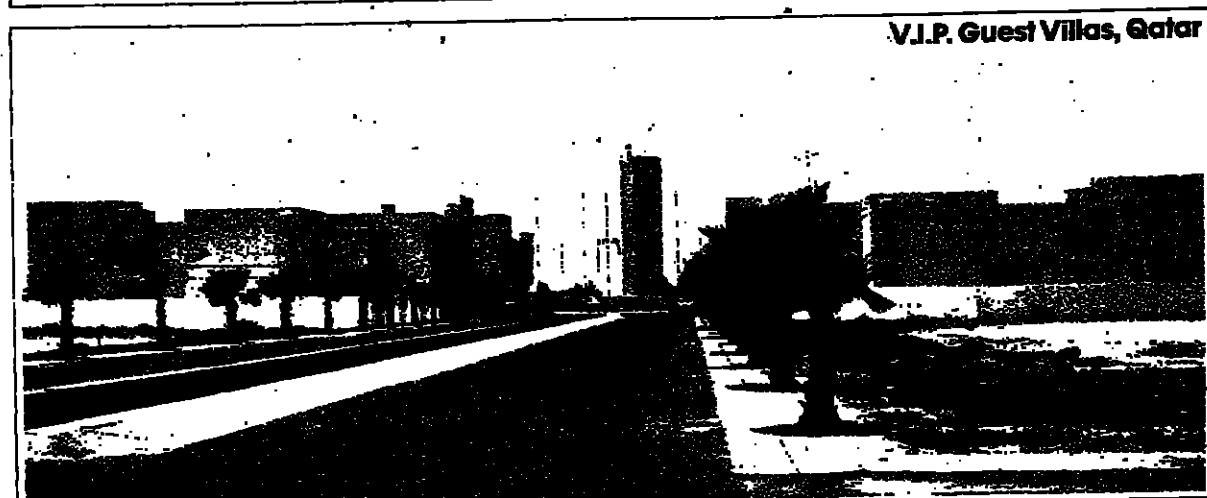
But, the clampdown on land purchases has hurt the construction market.



Senior Staff Club, Qatar



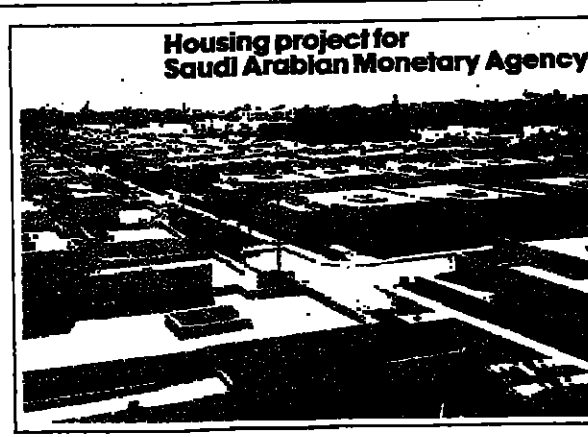
Gulf Hotel Tower, Doha



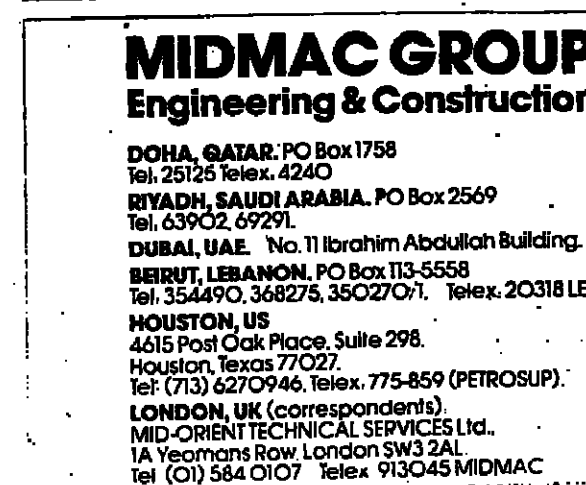
V.I.P. Guest Villas, Qatar



The Shopping Centre, Doha



Housing project for Saudi Arabian Monetary Agency



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Houston, Texas 77027
Tel: (713) 627-0946, Telex: 775-859 (PETROSUP)
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1A Yeomans Row London SW3 2AL
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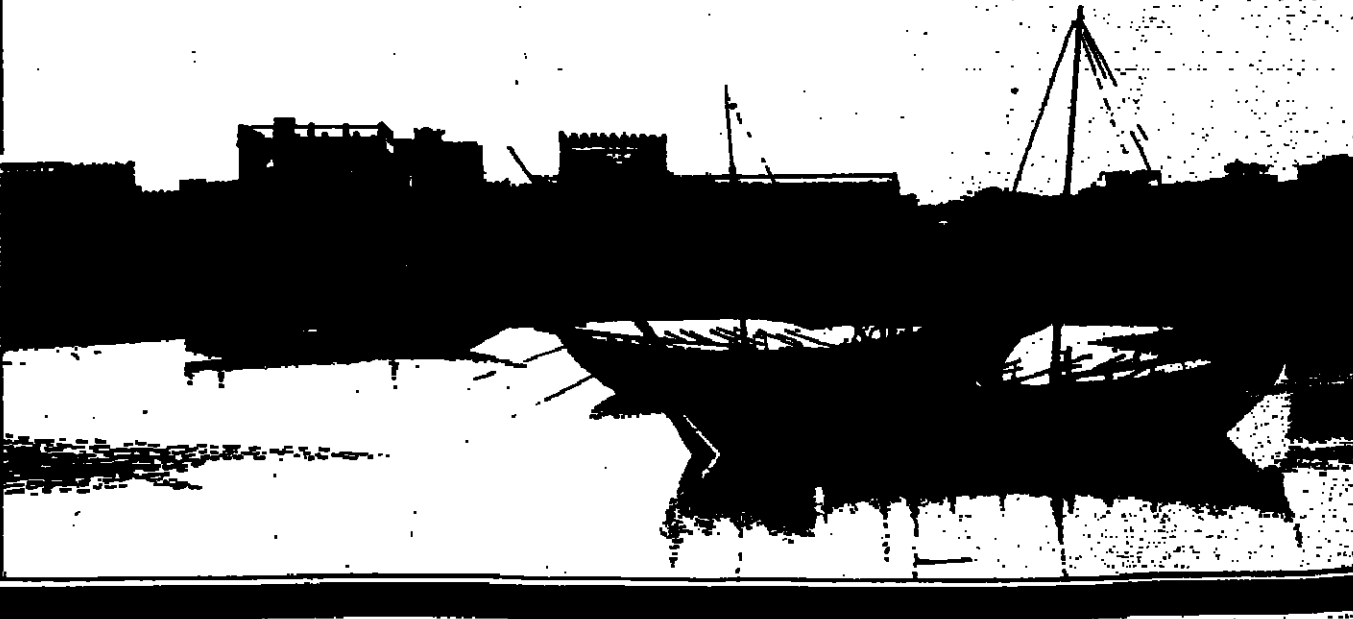
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A Dusty Town Symbolizes Plans for Industrial Diversification

UMM SAID (IHT) — Qatar's plans to diversify its economy beyond oil exports hinge on its abundant supply of natural gas. It can be used either as fuel for energy-intensive industries or as feedstock for petrochemicals.

Like a smaller version of Saudi Arabia's Jubail industrial area, Umm Said is the new industrial zone 35 miles south of Doha where all the plants are to be located. Chosen for its deepwater access for ships, Umm Said eventually will become an industrial city.

Already a core of plants throbs with activity.

The newest is a steel mill owned by Qatar Steel Co. (QASCO), which opened this year and should

have a capacity of 400,000 tons a year by 1980. Using the direct reduction process, which can be economically employed in developing countries producing comparatively small amounts of steel, this plant is expected to make an annual profit of \$15 million by the late 1980s. About 30 percent of its output of bars and billets will be consumed locally, and most of the rest will be exported to Saudi Arabia and the United Arab Emirates, officials say.

The Qatar Fertilizer Co. (QAFCO) produced 293,000 tons of ammonia and urea fertilizer last year. Some of it was exported to Asia and East Africa. Plans are under way to expand QAFCO as more natural gas is gathered for

consumption instead of being flared. Executives here say the outlook for nitrogen-based fertilizers is good for the next decade.

A flour mill and a small 6,000-barrel-per-day refinery are also in operation.

The largest industrial development — and the core of Umm Said's future development — is a

massive complex of petrochemical installations.

Although progress was set back by the explosion at NGL-1 in April, 1977, the government has decided to rebuild the natural gas liquefaction plant and to simultaneously press ahead with the construction of NGL-2 under the auspices of the Qatar Petrochemi-

cal Co. (QAPCO). A steam-cracker to produce ethylene and polyethylene for making low-density plastic is also rising from the sand. In addition, a larger oil refinery is planned to complete the industrial zone, four kilometers of berths have been built and a small floating repair dock is planned.

There is some sensitivity over

whether the existing factories are making a profit. QAFCO claims it has made "an overall profit" since it went into operation in 1974, but the question of gas costs remains unclear.

Once the factories are probably in production, Qatar probably will set up an industrial holding company — like Saudi Arabia's SABIC —

and will eventually sell off its shares to private citizens, a planning expert predicted.

In this program of heavy industry, the Qatar government is playing the leading role as investor and planner.

At the same time, Qatar has adopted a policy of taking foreign partners in its heavy-industrial ven-

tures. Like Saudi Arabia, this country feels a foreign company's equity participation — up to 50 percent — will insure that Qatar benefits from top-notch expertise and also will get an emerging wedge into world markets.

A side effect of this policy has been the growth of a cosmopolitan flavor in Umm Said, a dusty town with two grocery stores on its main shopping street.

The 2,000 permanent workers and 1,000 workers in temporary camps include Japanese from Kobe Steel at QASCO, Norwegians from Norsk Hydro at QAFCO, and Belgians and French from CDF Chemie on QAPCO projects.

The overall planning of Umm Said rests with the government's Industrial Development, Technical Center based in Doha. A small office, with about 35 planners and engineers, it works directly for Qatar's ruler.

The center is also trying to interest local businessmen and foreign partners in a light-industrial zone at Umm Said. This has been studied by a French consultancy firm, and a shopping list of industries has been drawn up, including plastics, building materials, fruit and vegetable canning, and electrical goods and appliances.

The center is also responsible for the actual layout of Umm Said. "We want it to be a city, not a work camp," an Egyptian engineer at the center explained.

Umm Said, with a present population of about 3,000, is slated to have a population of 20,000 people by 1980. In the long-term plan for Umm Said, devised by William Pereira Associates, the population projection is for 30,000 by 1985 — 90 percent expatriates.

Although a multistory building is taking shape for the QASCO employees, only a few permanent homes have been built. For the most part, Qatar has been obliged to let companies proceed with housing for their own staffs. Many expatriates prefer to commute from Doha.

So far, the emphasis has been on putting the factories into operation. Questions like amenities, social services or pollution can be taken up later, officials said.

When more Qataris are qualified to join the government administration, it may be possible to accelerate the pace in developing an industrial pole.

—J.W.

In this program of heavy industry, the Qatar government is playing the leading role as investor and planner. At the same time, Qatar has adopted a policy of taking foreign partners in its heavy-industrial ventures.

Preventing Duplication of Development Projects in the Gulf

By Mary Jo McConahay

DOHA (IHT) — The lack of economic coordination among Arab states in the Gulf is the weather: everybody complains, but nobody does anything about it. This may change, thanks to the Gulf Organization for Industrial Development (GOIC), which was set up last year to coordinate the industrial building and prevent wasteful duplication of development projects.

The mission of the Gulf Organization for Industrial Development (GOIC) is to provide a kind of industrial decision-making, suggesting feasible projects and discouraging those that are uneconomical or redundant.

GOIC could also become a body for studying and coordinating projects of Gulf petrochemical products, which are likely to be the basis of the Gulf's next industrial stage.

GOIC was first envisioned two years ago at a meeting of the ministers of industry of Saudi Arabia, Kuwait, the United Arab Emirates, Bahrain, Oman and Qatar. This year it began operations in multifloor offices in a new building of Doha. GOIC is only an advisory body. It is unclear how much leverage it will have on final decisions in the capitals of the Gulf states, which offer a wide contrast in political styles, none of which is immune to the seduction of prestige projects.

Many member states, however, agree that GOIC is an idea whose time has come. Saudi Arabia, with the most money and most ambitious projects on the drawing board, is squarely behind GOIC. Qatar, which constantly calls for closer Gulf economic integration, has offered GOIC a location.

First Priority

Ali A. Alkhalaf, a U.S.-trained engineer and an academic administrator at the University of Petroleum and Minerals, Dhahran, says the organization's first priority is setting up a data base. The Doha

center is in the process of becoming a storehouse of all available information about the region's raw materials, manpower and general infrastructure. The work is in the pioneer stage, because facts about the Gulf countries are still not easy to acquire.

GOIC is choosing computer hardware now. Terminals will be set up in the ministries of industries of each member state and will be linked to the Qatar headquarters.

For many frustrated regionalists, GOIC has not come too soon. Almost every state in the Gulf is

For many frustrated regionalists, GOIC has not come too soon.

building or planning petrochemical and other energy-intensive heavy industries to maximize its oil resources, develop an industrial base and put off the day when the wells run dry.

Although the goal in the Gulf is economic integration, there are already incidents of wasteful duplication in fertilizers and aluminum, for instance.

In another case, steelmaking by the direct-reduction process, which uses gas, is planned or is under way in Saudi Arabia, Iraq, Qatar, Abu Dhabi and Dubai. And a recent report prepared for the Port Authority of Sharjah shows that the region

could soon be facing great overcapacity, resulting in a price and concession struggle, with some facilities lying almost permanently idle.

Mr. Alkhalaf defends the proliferation of petrochemical plants, stressing the logic of creating basic industries at energy sources. But he feels downstream manufacturing, assembly plants and other secondary industries need much more careful examination than they have been accorded.

Much of the responsibility for overbuilding and regional conflicts of interest has been attributed to

hired private consultants, who may not always have the best interests of their client governments at heart or who may not be looking at industrial planning in a Gulf context.

Expertise

Since the sparsely populated Gulf states do not have the capacity to absorb all the products of the planned industries, Mr. Alkhalaf says, the members of his team will provide export marketing expertise.

Marketing, he says, is another aspect of development that has been entrusted to foreigners because it has been "overlooked, underestimated and at the same time become too much of a mystique" among local industrialists.

GOIC aims to be a post-boom service as well. Mr. Alkhalaf wants to push for Gulf-wide standards of measurement. He says there is no reason Saudis and Qataris should have to throw away their household appliances because they use different voltages when they cross each other's borders, for instance. He envisions a regional service center once industries are operating.

"Maintenance should be no more than 3-to-4 percent of working capital, but around here it may run to 15 or 20 percent," he says. Equipment could be "standardized" in the planning stages. There's no reason for everybody to have an expensive stockpile of the same spare parts.

—M. J. McC.

A Museum to Preserve the Force of National Roots

DOHA (IHT) — Oil-boom hotels and office buildings of steel and glass jut into the sky along Doha's corniche — itself only recently granted on landfill. In the countryside, entire villages have been abandoned as their inhabitants are relocated in newly built towns.

Daily encountering changes in the pace of living and the face of the land, Qataris say they look to the past for assurance and a sense of identity.

A reflection of this impulse is a crumpled seaside fortress on the corniche. Glimmering white and tranquil under the hot Gulf sun, Qatar's National Museum is exquisite by any standards. Until recent-

ly, it was a complex of 10 crumbling buildings, the old Al-Thani family residence.

Sheikh Khalifa bin Hamad al-Thani, the prime mover of the museum project, remembers spending childhood days playing in its maze of rooms and near the sea, where they almost washed its steps.

Designed to preserve the domestic scenes that are disappearing so quickly from Qatari life, the garden-level spaces have been restored to simple, utilitarian beauty.

Wandering through a courtyard scented with frangipani, visitors come upon a high-ceilinged porch filled with the paraphernalia of the important coffee ceremony.

The museum itself offers a panorama of Qatar, using audiovisual

technology to bring the past visibly alive. Qatar's geological formation is dramatized by an animated film in what looks like the bottom of a deep desert well. Local bedouin life is reenacted in film clips, and there is a capsule survey of petroleum science.

The high point of the museum is a private lagoon on which are anchored six specially commissioned Gulf dhows. Probably the last to be built in the old way, without structural modifications for inboard engines, these boats bring to mind the days of the Gulf pearl trade.

There is an aquarium of Gulf species, with a show-shaped room upstairs to display part of the Emir's private pearl collection.

An effective technical aid, the

museum is visited regularly by classes of school children. On Fridays, families crowd in.

The force of roots is championed by the young director, Nasser al-Othman.

Besides his official responsibilities for a folklore troupe and a theater group, Mr. Othman has started a project to research and collect material on local folk and artisan traditions before they disappear altogether.

In the immediate aftermath of the oil boom, many people in the Gulf got in the habit of dismissing any inquiry about the past as "before oil, not interesting." The attitude of ignoring the past has quickly given way to recognition of the need to use the past as a method of

anchoring the present political setup and reminding people of their heritage.

Qatar officials enthusiastically supported the research of a Western author, Helga Graham, into the customs of the older generation, which she documented in her book, "The Arabian Time Machine."

Now other Gulf governments are exploring ways to obtain a similar recording of their own history.

Mr. Othman, for instance, has adopted a conscious policy of resisting moves to import Western art that might be imitated here. It is part of Qatar's new awareness of the need to develop a historical memory to counterbalance its unlimited future.

—M. J. McC.

The Companies and Activities of Sheikh Ghanem Bin Ali Al-Thani

One of the leading citizens of the young State of Qatar, Sheikh Ghanem Bin Ali Al-Thani has been contributing to the development of his country in a diversity of ways:

GHANEM GARDENS:

A high-quality residential complex, the first phase of Ghanem Gardens consists of 83 Spanish-style houses in landscaped surroundings with swimming pools, club house, squash courts and children's play areas. Ghanem Gardens is undertaken by Ghanem Bin Ali Investment Company (GIBICO). The Gulf Project Services Group (G.P.S.), an affiliate of Lincoln Property Company of Dallas, a leading U.S. firm in the development and management of real estate, has assisted in the project. Gulf Project Services (Qatar) P.L.L.C., a joint venture between G.P.S. and the Gulf Group, is responsible for development management and ongoing estates management.

NEW TRADE COMPANY:

Another aspect of the various activities of Sheikh Ghanem is New Trade Company. New Trade Company mainly deals with high-class consumer goods, such as the glamorous Patek Philippe collection of jewelry and watches and the top quality leather products of Cartier. In addition, New Trade Company deals with Patek-Guheri porcelain and antique equipment among a wide variety of well-known and respected agencies.

THE FARMS:

Since his childhood, Sheikh Ghanem has been fond of farms and farming, so much so that he has frequently tended to them in person. At one time, Sheikh Ghanem's farms were the main supplier of vegetables to the Doha veg-

etable market. Recently, the Sheikh has called on the experience of the celebrated American firm, Hawaiian Agromech, to take over the administration and development of all his agricultural and farming interests, so doing by using some of the most modern techniques in the field.

THE QUARRY:

Sheikh Ghanem owns one of the largest quarries in the State of Qatar. This quarry employs some seventy technicians and laborers, and it produces all sizes of gravel, ranging from one quarter of an inch to one inch. Piles estimated to exceed 60,000 cu yd. are ready to be sold. Recently, the well-known Italian firm, Dravo Contrattori, has been appointed to undertake the administration and complete mechanization of this quarry.

THE CENTER:

The first and largest purpose built shopping center in the Middle East, the Center was inaugurated on 25th April, 1978. The Center is one large, air-conditioned building, as opposed to a series of small independent retailing units, and the entire store is managed by the expert Bahraini based company of Jashman & Sons. The store was designed by Pich and Company of the U.K.

Selling space is divided into three 18,000 sq. ft. wings. One wing is the food hall, the second wing sells clothing, and the third wing is devoted to general merchandise. The fourth wing of the cross-shaped building is the store's own 20,000 sq. ft. warehouse.

RAMADA DOHA:

The Ramada Doha covers a gross floor area of around 28,000 sq. m. on a site of 50,000 sq. m. It is the largest and most luxurious hotel in Qatar, perhaps in the whole Gulf area. Twelve stories high, it has 420 rooms and suites in addition to swimming pools, gourmet and Oriental restaurants, cafeteria, conference halls and ball rooms. The hotel is situated in an ideal spot at a 10-minute drive from the airport and an even shorter distance from the center of town. The Ramada Company manages more than 700 hotels. The Ramada Doha has been designed to be most luxurious of all.

THE GULF GROUP:

As Chairman of the Board, Sheikh Ghanem daily follows the various activities of the Gulf Group. With his moral and material backing, the Gulf Group has become well administered and well equipped, using the expertise of specialized people from all over the world. In cooperation with the Group's International relations, a complete study was prepared and master plan laid out designed for a piece of land on which the Ramada Doha, the Center and Ghanem Gardens are situated. This master plan is undoubtedly one of the largest projects in the Middle East, (with its final stages including a recreational center), furnished apartments, a commercial center, office and bank buildings and a residential area. All of this will eventually be the new center of town, throbbing with life and activity. Each minute detail is taken into consideration through the well researched feasibility studies. The area is still another of Sheikh Ghanem's contributions to the development of his country and people, under the guidance of H.H. Sheikh Khalifa Bin Hamad Al-Thani, Emir of the State of Qatar.

THE GULF GROUP—ARCHITECTURAL DIVISION:

Since the Architectural Division of the Gulf Group was set up, it has been involved in a large variety of activities. These include town planning and development within the Division drew up the master plan for Sheikh Ghanem's land. The Division has also been involved in the residential sector by working on the master layout for Ghanem Gardens. In the commercial sector, the Division has provided the design of an apartment hotel, an office tower and a bank building. Besides, the division has designed a car and heavy equipment showroom, as well as their maintenance and repair garage.

THE GULF GROUP—INFORMATION AND STATISTICS DEPARTMENT:

Unique in the State of Qatar, the Gulf Group's Information and Statistics Department has been working for the past two years on compiling and classifying information and statistics about Qatar and the Middle East. The Department is capable of carrying out economic research and of helping in feasibility studies. It has put out several reports introducing Qatar's industry and economy. Such studies are chiefly aimed at assisting the Gulf Group and the foreign firms it is associated with to better comprehend business done in the country and the whole area.

THE GULF GROUP—CONSTRUCTION DIVISION:

The Gulf Group Construction Division undertakes general contracts with the cooperation of Arecon (Arab-European Contractors). The Division was established with the technical assistance of Peter J. Bodensohn, Wiesbaden, a German contractor with nearly 100 years of experience in the construction of hospitals, schools, office and administrative buildings, road construction, airports and channels. Extract of references: German TV Administration Building in Mainz, Rhein Main Airport Runway N° 3, Frankfurt City Bank head office, Wiesbaden City Hospital, Aschaffenburg.

GULF CONTRACTS (OVERSEAS) LTD:

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THE GULF GROUP—INTERNATIONAL RELATIONS:

The Gulf Group takes as much care of its international relations as it does with its local activities. The Group has established strong ties of cooperation with some of the leading firms in all corners of the world from Kvaerner Engineering in Oslo to Industrie Rutilini Perugini, Dravo Contrattori, Fabbri Editori, and IRI in Italy, Nello L. Teer Co., R.E. Dailey & Co., Hopkins, Ramada, Citibank and LPC in the U.S.A., Bodensohn in West Germany, Nitz & Co. in Switzerland, the Gulf Group International in Beirut, F.F. & F. Grindlays in London, Banque Arabe et Internationale d'Investissement in Paris, Siab-Byggen in Sweden, Talal Abu Ghazaleh Associates Ltd. in Amman, Price Waterhouse Abu Ghazaleh in the Middle East, Ghanem Bin Ali Holding in Geneva, among many others. All these connections add to the Group's intensive activities, more insight into international business.

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Agriculture: Blooming Desert Will Feed the Nation

DOHA (IHT) — The visitor to this experimental farm north of Doha might easily forget he stands in the midst of one of the world's most barren deserts. Yet these acres of trees and greenhouses are more than a showcase: Agriculture, introduced in Qatar only 20 years ago, has become serious business.

The government's declared aspiration is nothing less than self-sufficiency in foodstuffs. The new generation of Qataris will never again be satisfied with the once-staple diet of fish, dates, camel and sheep meat and unleavened bread. Influenced by the habits of the foreigners among them and introduced to variety through new affluence and travel, people in Qatar consume about 185 kilograms per head each year of fresh vegetables, according to a recent Food and Agriculture Organization (FAO) report — more than the inhabitants of Lebanon and Jordan.

The cost of living is another good reason for concentrating on local production: The government realizes that inflation at the local souks is a politically sensitive issue.

Farming in Arabia, however, is generally considered a less-than-respectable occupation. Most of the 1,600 workers on the country's 400 small farms (average size: three hectares) are from Iran or Baluchistan, Pakistan, working for Qatari landowners.

The Government

While Qataris themselves probably will never plant or plow, the government in Doha is solidly behind the push for increased production. The Ministry of Agriculture tests seeds and plants and then distributes the most successful free to the farmers. The government also supplies free fertilizers, pesticides and insecticides and various services, including deep ploughing and harvesting.

The results are considerable, particularly when one takes into account the poor soil, scarce water and manpower and complete lack of agriculture before the 1950s. Today, Qatar is virtually self-sufficient in fruits and vegetables from January to May and even exports small surpluses during these months. The market in downtown Doha is filled with firm, rich-colored, locally grown tomatoes, cucumbers, eggplant, onions and squash. The date is still a favorite fruit crop, and local melons are es-



Gardener tends melon plants on experimental farm.

pecially sweet and plentiful. Citrus, pomegranate, figs, guava and grapes are also grown.

Besides fruits and vegetables, the government is experimenting with wheat and barley. Last year, it distributed free nearly 70,000 tree seedlings, ranging from eucalyptus to jujubes.

Seen from the air, the green tilts of trees lining the country's

main highways look like frail bulwarks against the massive desert. Yet the forestation project, fed by the simple but efficient drip irrigation method, appears to be off to a successful start and is supported at the highest political levels. In Qatar, trees are not simply a new luxury: Forestation is seen as a step toward sand stabilization and toward a more benign climate by

the taming of fierce desert winds.

While there is not yet an agro-industrial sector in Qatar, the government itself has embarked on several projects including importing of cattle for beef and dairy products, sheep-raising in the south, an unsuitable area for agriculture, and a successful poultry and egg enterprise that is filling most of the growing domestic

demand. Chickens are still often sold live, a fact that illustrates the local preference, fed by religious tradition, for freshly slaughtered meat.

No matter how intent they are on feeding themselves, the agriculturalists of Qatar labor under the tremendous constraint of scarce water.

For farming, the country is divided into three zones: the north, which is muddy, silted and dependent on a reservoir of underground water with varying mineral content; the midlands, which are also low-lying but with lighter, sandy soil and a dependence on well water; and the south, mostly sand, where wells are brackish. In the entire land, there is not one river, rainfall is seldom over 50 millimeters a year and the underground freshwater sources are being exploited too fast. Since agriculture came to Qatar, more sweet water is being tapped than is seeping back into underground reservoirs.

An FAO report published this year discouraged the Qataris' bold intention to inject distilled seawater to augment underground sources. Not only does this idea still pose some technical uncertainties, said the FAO, but it would require the government to subsidize agriculture indirectly to the tune of 85 to 100 million riyals per year — a sum that means producing basic food crops at five to six times their world mar-

ket price. This "horizontal" expansion would also mean importing even more foreign laborers, a situation the government does not want.

Instead, the FAO recommended "vertical" expansion, including increasing the yield on existing plots by introducing modern water-saving techniques and capital-intensive, controlled-environment production units.

According to the report, these might raise the output of certain vegetable crops "by a factor of 20 to 30 over that presently obtained from traditional methods."

Is there a chance that this sandy and stony peninsula might someday be the market garden of the Gulf?

"The question is still economic," said one UN adviser. "I remember an exhibition where I ate a big, delicious strawberry grown right here. I thought, 'We can grow anything in Qatar.' Then I thought further and realized that that single strawberry cost about four riyals. Yet Qataris who would see their desert bloom have put their faith in science."

"We have received budget approval for a remote-satellite sensing project to determine where fresh water sources are — both on land and offshore," said a government official in the palace of the emir. "If we have the technology to get oil, surely we can get water, too."

—M.J. McC.

Construction Suffers From General Slowdown in Gulf

UMM SAID (IHT) — Last year, Qatar had one of the highest per capita spending figures for construction in the Gulf, generating \$461 million worth of work for the local and international construction industry. It imported \$14.6 million in cement, \$21 million in steel bars and \$63 million in new and used construction equipment.

But the flow of contracts through the Middle East that has brought hundreds of millions of dollars' worth of business to U.S. and European contractors is slowly but perceptibly dwindling throughout the Gulf. Qatar is no exception.

Both the public and private-sector construction markets are now suffering a recession — at least in comparison to 1976 when the country's 12 banks were financing a real-estate boom.

Construction spending seems

likely to decline despite an ambitious development plan for Doha city, centering on 300 acres of reclaimed land at West Bay. "There has been a major falloff in work this year, even for some badly needed projects like the naval base," a consultant said.

As Qatari contractors, particularly those in joint ventures with foreign companies, are likely to get the biggest slice of the dwindling work, several large international contractors have wound down their operations in Qatar to a token presence.

Little Interest

One reason for the decline is that the private sector in Doha has shown little interest in prestige housing or villa development, perhaps because the country lacks the recreational attractions of Dubai or Bahrain.

Another has been royal directives to banks, banning the financing of real-estate loans, which had the effect of stopping a wave of speculative building.

Every indication suggests that the government has been motivated in cutting back the public building program in 1978 by a belief that many bids submitted to the government have been overpriced.

Some specialists here claim that building costs have dropped from \$850 a square meter in mid-1977 to \$700 a square meter.

Factors that have contributed to the drop include the easing of port congestion, the general decline in competition for skills and raw materials as other Gulf states reach a construction plateau and the development of contracting infrastructure inside Qatar.

A test case could well be the

\$170 million project for a Doha Sheraton hotel and conference center. Dominating the entrance to Doha bay, the steel framework for the 16-story Gulf skyscraper — often described as the ruler's "pet project" — has been standing on the sandy point for months. Construction was halted after a quarrel over revised cost estimates. New bids have been sought for completion of the complex, the keystone of the West Bay development area.

Cheaper Labor

The architects, William L. Pereira Associates of the United States, believe labor will be cheaper now than when the job was tendered originally. Changes in the costs of building materials is another matter, they said.

A special problem of construc-

tion in the heat of more than 50 degrees centigrade is obtaining enough cooling water for making cement. A solution that does not use expensive chilling equipment was worked out at one site in the Umm Said industrial zone by a Qatari contractor, Cibulco, using a pyramid-shaped cooling device based on the principle of a frankincense burner.

"One thing that's changing around here," says the site manager, "is that the standards set by local contractors are very good. The quality is often better than in Europe now because we have sharp supervision, and people are pleased to learn. They might not know too much at the beginning, but they are hard workers, even in summer when conditions are nearly impossible."

—J.W.

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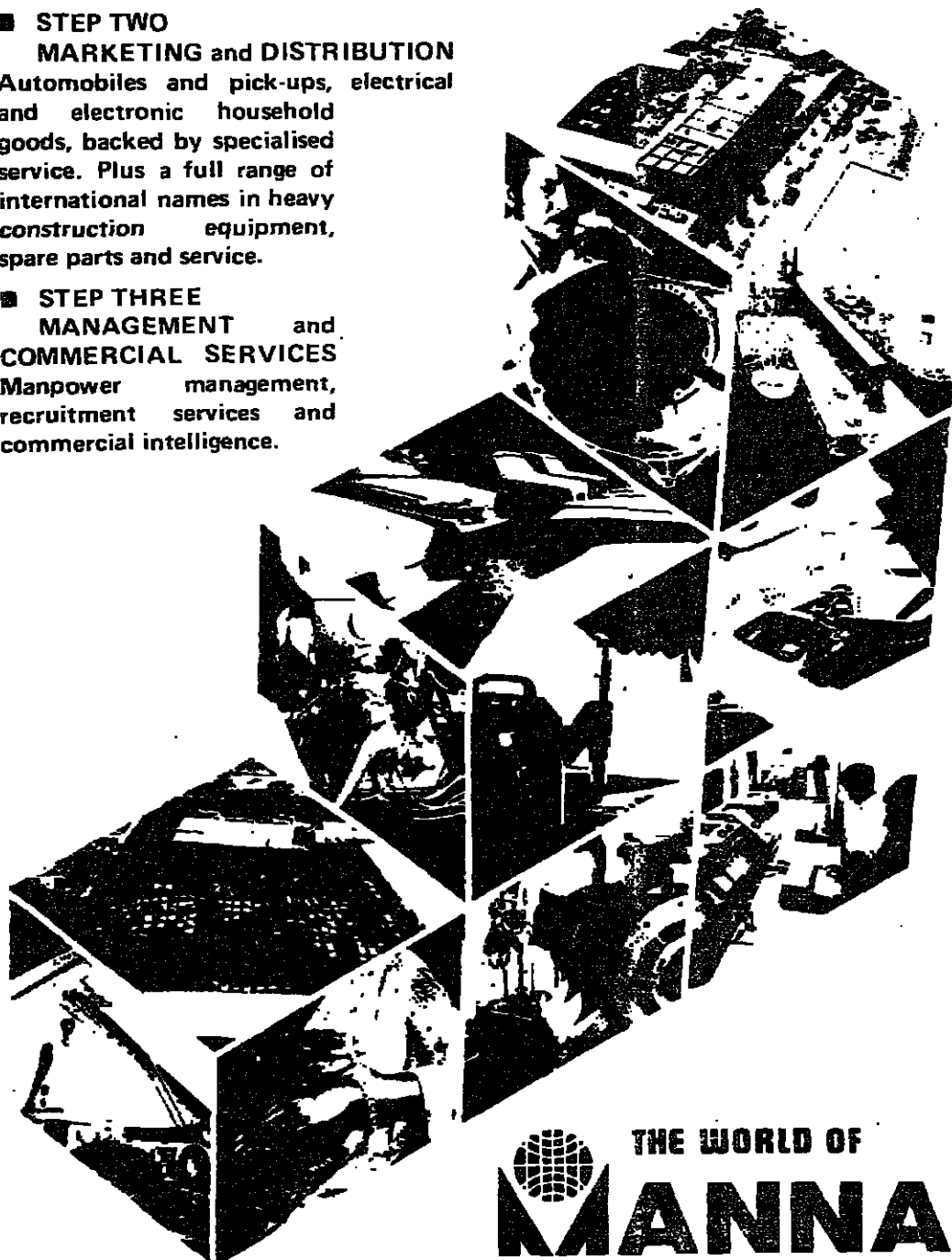
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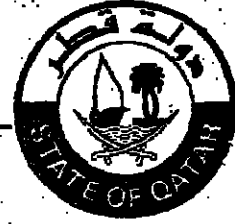
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Social Services Have Key Role in Building a Modern State

DOHA (IHT) — The key to Qatar's plans to build a modern economic state is a vast program of social services to promote stability and a smooth transition into its future.

Less than three decades ago, Qatar was an impoverished sheikhdom of 35,000 souls. Many had been pushed by hard times to look for jobs elsewhere. But in the past few years, oil wealth and enlightened government policy have changed the picture.

Today there is a job in the government bureaucracy for every Qatari who wants one. There is no unemployment in this nation of 300,000. In addition, every Qatari has an expected decent housing, free education and free medical care, and he and his family can look forward to being rich adults.

Education is an excellent example of the country's dramatic leap in social services. In the 1950s, there were only two schools in the entire country. By 1982, Doha aims to have every primary school child in newly built classrooms (today's enrollment is 23,527), with two-thirds of all pupils attending secondary schools.

Almost half the young pupils are girls. Even though girls and boys attend strictly segregated schools, education for girls is seen as a noteworthy stride in a region where a girl who has memorized the Koran is still sometimes thought to be sufficiently educated.

"The government is for it," says a secondary teacher in Doha, "but some families are dragging their feet."

The country has set up adult education centers run by the government. In addition, there are two regional projects within the United Nations Development Program: a vocational center for artisans and technical students and a Civil Aviation College to train air traffic controllers and other airport operators and maintenance personnel.

The University

But the pride of the system is the University of Qatar, whose separate men's and women's campuses are now under completion just outside Doha.

At one time, Qatar's teachers college envisioned itself as a campus of a greater federated Gulf University. That idea has fallen through. The college has been upgraded and expanded until it now offers university curricula, including schools of education, science, humanities and Islamic studies.

Ninety percent of the 1,900 students are Qatari (the other 10 percent are mostly Palestinian). Women account for more than half the student body — higher education for women was given a boost when Sheikh Khalifa bin Hamad al-Thani sent his two daughters to the school. The faculty for the most part is foreign, but there are some distinguished Qatari exceptions, including the nation's first two Ph.D.s, a sociologist and a physicist, both women.

The rector, Ibrahim Kazem, a U.S.-trained Egyptian, stresses the fledgling institution's aspirations to international standards: "It wouldn't hurt us for five years to give away no master's degrees in education," he says. "But it would hurt us to become known as a diploma mill for Qatari."

Mr. Kazem is one of a growing number in the conservative Gulf areas calling for a slowdown in sending native sons abroad to study.

"With a foreign degree a young man can become a stranger in his own land," says Mr. Kazem. "It makes it more difficult to function and keeps him from feeling at home in the old system."

Yet it is unlikely that the policy will soon change. Qatar wants to develop its own class of managers and technocrats as quickly as possible, and even the best intentions will not enable local facilities to meet that need at home for years to come.

The aim of the national health program, however, is specifically to put an end to sending Qatari sons abroad for treatment. Thousands of men and women flock to clinics in London each year, and the gov-

ernment picks up the QR 150 million tab for treatment, travel and upkeep.

Money, of course, is not the question. The 660-bed Sheikh Hamad hospital under construction in Doha will be one of the most costly medical units in the Middle East: the cost is estimated at QR 100 million for construction and QR 250 million for equipment, including computerized diagnoses, a system of helicopter ambulances ("actually

cheaper than building hospitals in some remote areas," a planner explains) and a management and medical staff recruited mainly from the United States.

It is important, a government official says, for the new hospital to be "not a showcase, but something Qatari eventually will take over — expensive, but not filled with fancy equipment that will be used rarely."

The down-to-earth attitude is echoed in the plans for primary health care, a much-needed program that now appears to be getting under way. The new blueprint calls for 10 health centers dotted throughout the country, each responsible for the care and records of about 15,000 Qatari and non-Qatari residents.

"One concept we have to establish is that the centers are not only to be visited when something hurts," says a U.S. doctor with extensive Middle East experience who is working with the Qatari.

Following local practice, Samia married her first cousin.

"Yes, I supposed this is an 'arranged' marriage in a way," she says. "But we have known each other all our lives, and we were very

happy to be married. My father would not have forced me if I was against it. Many of my friends are not married to their cousins — it is a custom which is changing. But in Qatar it is so hard to meet Qatari men! It must be done in secret — which is almost impossible in such a small place — or by chance when families go abroad for medical care, or sometimes the boy might get the girl's number and they will talk for weeks on the phone. The family would be disgraced if they were seen together."

When Samia's cousin returned with his engineering degree from California and they married, he encouraged her to teach and arranged for a live-in maid to be brought from Sri Lanka to care for their new son during class hours.

Affluence and an extended family system provide Qatari the child

care that so many Western working women lack. And unlike Saudi Arabia, it is legal for Qatari working women to drive, yet even this freedom is circumscribed by the family.

"Oh, by law I could have a license, but my husband is afraid for me driving alone," says Samia. "Even if he allowed it, my brothers would not want their sister to be seen driving a car, and they would argue with him. So it all comes to the same thing, doesn't it?"

Samia has a married sister in her thirties who completed only primary school, and her mother is attending government literacy classes. When Samia speaks of them and of her younger sisters, it becomes apparent that among Qatari women, even seven years can make a generation.

"One of my younger sisters is studying interior decoration," she says. "I think this is a wonderful idea for Qatari girls because even if we are teaching for a few years now, we will all end up as housewives. But the youngest — she is 17 — she wants to work on

television! And my parents allow talk about this without discouraging her."

"I notice she wears her abaya now all the time and is trying to

impress them with how responsible she is so they will let her go to Cairo to study. Her friends still go to the Center (Doha's mammoth modern department store) and see

boys, but she has stopped that, too. There are some Qatari girls in television, but my sister? Well, if my brothers allow it, I suppose it will be all right."

— M.J. McC.

The Condition of Women Remains Slowest to Change

Only about 2 percent of the present labor force is female.

in the United States or Britain, as so many of the young Qatari men do. For a while some went to Kuwait or Cairo, but now even these Arab capitals are considered too far afield; today, Doha has its own university where local women are in the majority. Other women are sent to Saudi Arabia, which shares with Qatar the strict Wahhabi version of Islam. Samia's spoken English is so poor that an Egyptian teacher must be called to interpret; she attributes her lack of facility to being refused family permission "to study" somewhere where people speak English.

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— M.J. McC.

A Young Technocrat Returns

DOHA (IHT) — Khaled al-Khater, 30, is the director of engineering at the Ministry of Public Works and oversees the execution of contracts worth more than \$500 million a year on projects ranging from sewers to airports.

He is one of the first wave of Qatari who went abroad for their education and have now returned to become "the first Qatari to hold the top job" in their fields in their own country. Until recently, only a handful of Qatari studied abroad, but this year more than 1,000 Qatari are enrolled in foreign universities, most in the United States. So far, only about 50 Qatari technocrats have returned, but this number is expected to increase rapidly.

As Qatari are only beginning to take hold of the levers of power in their own country, at least the first of these technocrats are assured of top jobs, and their impact on government and the business community is considerable.

Mr. Khater is a handsome man with a direct manner and a winning smile. The action plan on his wall may be for the year 1398 in the Islamic calendar, but his brisk, businesslike style is very much in 1978.

Pinpointing Qatar's needs in his field, Mr. Khater speaks with assurance. "The priority project is to finish the program of school building," he says. "The other urgent schemes are a new airport terminal building and the new general hospital."

In his country, Mr. Khater feels, "the quality of life is gradually improving," but he wants more facilities for recreation and even for shopping, to end the need for Qatari to "just take off for Europe when they need a new suit."

Mr. Khater has upset some businessmen with allegations about Western companies' overpricing in the Gulf. But he has shown contractors that he is ready to support them in struggles to collect payment — often delayed in this part of the world. Action followed his remarks about the need for stricter standards for building materials: a consultant has been given the job of drafting a set of building regulations expected to come into effect next year. It will be the first com-

prehensive building code in the Gulf.

In 1973, when Mr. Khater returned to Doha with a bachelor-of-science degree in civil engineering from the University of Michigan, the ministry's engineering department had been run by a British expatriate for 20 years. A year ago, Mr. Khater was moved into the top job.

Some Resentment

While the ouster of an expatriate in favor of a young Qatari often arouses some resentment and skepticism about the newcomer's ability to get results, the promotion of Mr. Khater ended a damaging period of bickering between the engineering department and the policymakers on the ruler's palace staff.

Mr. Khater himself is matter-of-fact about the change, which he treats as an inevitable part of Qatar's need to take over management of national affairs. In his year at the helm, he thinks, he has "revitalized" the engineering department.

"He has a positive attitude towards consultants and contractors," according to a veteran consultant in Doha. "If he doesn't like

what you're doing, he tells you so, straight to your face."

Relaxed with both Qatari and Westerners, Mr. Khater dresses in an open-necked shirt for work with consultants and Lebanese and Palestinian assistants, but dons the white robe of national dress for an evening at the Shell Lodge, an exclusive club for oil executives and senior government officials.

Mr. Khater's achievement, however, has been more than simply applying a veneer of U.S. education to his Qatari credentials — although, in a country with few qualified citizens, that already would be something.

He is starting a tradition of public service in his family. A younger brother, Ali al-Khater, director of the Doha municipality, is in charge of financing the capital for the state visit of Queen Elizabeth of Britain in February.

In five years, educated young Qatari like the Khaters may have to set their sights below the top jobs. The painful stage of removing long-serving expatriates is already coming to an end, and competition for jobs is starting among returning graduates. "The technocrats of the 1980s will increasingly need to be meritocrats," Mr. Khater says.

— J.W.

Government employees need pay back only part of the cost of public housing. Even senior staff and the wealthy are given land and a loan, 25 percent of which is written off immediately.

Some villages and quarters have been abandoned as the government has relocated its population in newly created centers like Khalifa Town, near Doha, and Madinat Shamal, on the northern tip of the peninsula. A community of govern-

ment housing is already being occupied near the growing industrial complex of Umm Said, where the population is expected to reach 18,000 by 1980.

The more that social services and other benefits of the nation's wealth come to the Qatari, however, the more underprivileged appear the four out of five residents who are immigrants and who have almost no chance of becoming citizens no matter how long they live here.

Nevertheless, rents for expatriates are high, immigrant labor cannot unionize, and education for non-Qatari children, even those born here, is private and often beyond the means of their parents.

While welfare expands to care for Qatari from cradle to grave, the gap is widening between the country's citizen elite and its worker-population majority. For the moment the situation is not explosive, but it remains unresolved.

— M.J. McC.

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Qafco doubles capacity

Qafco - Qatar Fertiliser Company (S.A.Q.), located in Umm Said on the Gulf - is currently doubling its fertiliser production capacity to 1,800 metric tons of liquid ammonia and 2,000 metric tons of urea per day.

The factories are managed and their products marketed by the leading Norwegian industrial group, Norsk Hydro, a major fertiliser producer for more than 70 years with wide experience in global marketing. Through regional sales offices and well-established agents, Norsk Hydro takes care of Qafco's world-wide exports of ammonia and urea.



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Foreign Laborers Form Backbone of the Development Effort

DOHA (IHT) — Qatar imports manpower at all levels. U.S. health and management-development experts plan government projects and overhaul the bureaucracy. French and Scottish engineers work in shorts and hard hats on the sites of future petrochemical plants and Norwegians run the country's big fertilizer operation at Umm Said. In every school and ministry, including the offices of the Emiri palace, a Palestinian, Egyptian or a Briton can be found working.

The backbone of Qatar's development effort is the tens of thousands of skilled and unskilled laborers who are constructing the nation's massive infrastructure projects: Iranians, Bangladeshis,

Indians, Pakistanis. Thais, Koreans, Sri Lankans — perhaps 160,000 foreigners, most of them from poorer, more heavily populated Muslim countries.

Most companies do their own recruiting abroad or work through established agents, and many rehire the same people from job to job.

Haji Mohammed Sherif came to Qatar from a poor agricultural town in what was then West Pakistan 14 years ago. He has learned some English in that time and is now a concrete foreman at a construction site at Umm Said.

"I go home every two or three years," he says. "My six children have all been to some school, thanks be to God, and in a few

years I will go home to them and to my grandchildren."

Haji Mohammed says he could never afford to bring his family to Qatar, where costly rent and food are beyond their means, and where schools for non-Qatari children are scarce and prohibitively expensive. Whether they have lived here for decades or are born here, foreigners cannot become citizens or claim a piece of the welfare pie that is the birthright of every Qatari.

"I am called 'Haji' Mohammed because I have made the pilgrimage. And in a few years I will go home and open a small shop in my village," he says, then fingers his grizzled beard. "What more could I want?"

Haji Mohammed's son-in-law,

Anwar, 32, wants more. A clerk-driver for the same European construction company and sometimes a spokesman for its Pakistani workers (there are no labor unions in Qatar), Anwar says his father-in-law is only 47 but looks so much older because "this desert is not kind to us."

"This is a place only for making money," says Anwar. "There is no other thing in life here." Anwar was a station master in Pakistan, but found he could make three times as much in Qatar as a laborer.

The two men live in quarters provided by the company, six bunks to a room with plastic shopping bags nailed to the wall to hold personal belongings. They are fed to their liking at company expense; in the

company kitchen, North Indian, South Indian, Thai and Pakistani cooks work over four giant pots to satisfy different tastes. Next door can be seen a tennis court and barbells at the camp of the aristocrats of the manual labor force, the well-organized Koreans.

The life of immigrant workers in Qatar ranges from hard to dull. It is made bearable, according to Anwar, by the way people from the same village or province stick together and by planning what they will do with their money.

Oil boom success stories wafting back to remote villages or relatively rich returnees to urban areas across the Gulf make many would-be laborers so desperate to cash in on the bonanza they become the prey

of unscrupulous or illegitimate labor brokers.

According to Americans who have worked on Doha construction sites with Pakistanis, this is a typical tale: An unskilled or semiskilled worker is promised papers, passage and a job by an "agent" to whom he pays the equivalent of up to \$400. The villager then treks — sometimes for days — to a beach rendezvous where he is packed into a boat with others like himself and subsequently dropped off along the Qatari shore. He wades in and may find a place to sleep with other Pakistanis, who are lodged a dozen or more to a room or in makeshift quarters on a job site. With luck, he then finds a job himself.

Yet for many immigrant labor-

ers, whether they enter and stay legally or not, the opportunity to earn up to \$10 or even \$25 a day is far better than earning next to nothing or being unemployed at

home. And while the life of foreign workers here is not easy, Qatar treats its foreign work force better than some other nearby countries.

— M.J. Mc

Arab-Americans Sought For 'Unique Advantage'

DOHA (IHT) — This nation relies heavily on non-Qatari Arabs to staff the government bureaucracy. Compared to an estimated 10,000 Qataris in the work force, there are more than 15,000 non-Qatari: Egyptians and Sudanese, Palestinians, Lebanese and Jordanians.

Egyptians are numerous in the school system. Many of them have archeological and religious backgrounds, a fact that is appreciated in Qatar. Egyptians also predominate in Qatar's state-controlled broadcasting services and in its press agency.

Palestinians, the second largest group, started coming here to work 30 years ago, even before oil promised a bonanza. More recently, skilled Palestinian refugees have arrived, helped by the solidarity that each Arab expatriate group feels for its kin.

Qatar, perhaps more than any other Gulf state, seeks to make maximum use of expatriate Arab advisers and to minimize the role of Western consultants, perhaps because it is felt that Arabic-speaking administrators are essential.

In particular, Qatar actively tries to attract Arab-Americans — men of Arab origin who have completed their studies in the United States and have had a professional career there. "We think Arab-Americans offer a unique advantage," an official says. "They have an Arab commitment, and they have learned the American approach — open-minded and problem-solving."

Not everyone stays, but those who do reinforce another pattern in Qatar: a reaction against British methods, which are associated with pre-independence, and a fascination with the American way, particularly with U.S.-style education and U.S. experts.

A Palestinian who is part of this new wave is Hisham Qaddumi, 38, who holds the job of technical

adviser to Sheikh Khalifa bin Hamad al-Thani. Working out of an office in the ruler's palace, Mr. Qaddumi is part of a team of advisers — some Qataris, some who are other Arabs — who share the responsibility for decision-making on development.

Before he joined the ruler's team, Mr. Qaddumi graduated from the University of Texas in 1965 with degrees in architectural engineering and economics and then worked in the Austin area, where he married his American wife. In 1974, he got a phone call. "The Qatari governor had heard of him and invited him to come to Doha."

"We try to have a pragmatic approach, so pragmatic it borders on enlightened opportunism," he says. "When Qatari planners were blocked from expanding the capital because of landowners' exorbitant prices, Sheikh Khalifa launched a massive earth-project extending the town's western beaches into the Gulf. At a \$3 million stroke, Qatar gained a port bay and a great deal of government land."

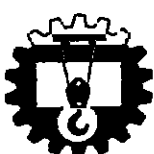
"Now we have more control over how people build, because this is starting from scratch," Mr. Qaddumi says. His office has prepared an imposing overall design, as candidates for acquiring space must conform to its outlines — effect, zoning regulations have been created.

Mr. Qaddumi was an early active supporter of the new Doha Club, a country club with an Olympic-sized swimming pool, squash courts, library, restaurant and nightly films on video cassette. "Young expatriate families are increasingly willing to stay on an extra year or more because amenities like the club are becoming available — and it is Qatar's gain," he says. The club attracts a relaxed mix of Westerners, Arab expatriates and, increasingly, young Qataris.

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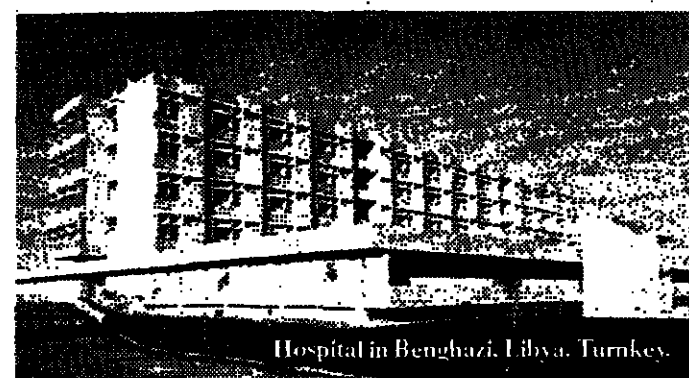
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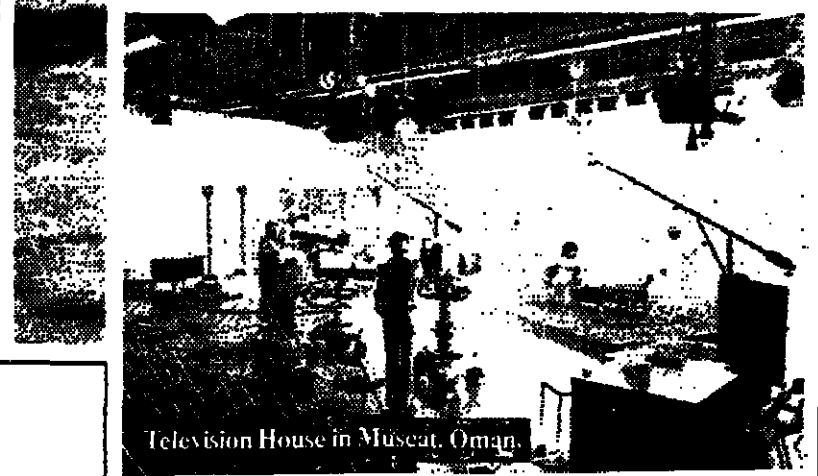
Hospital in Benghazi, Libya, Turkey.



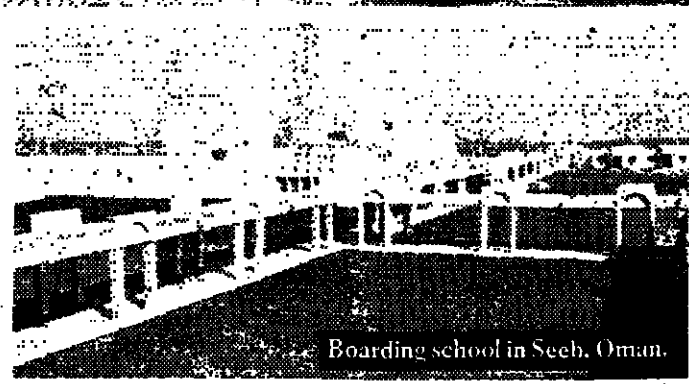
Water tower in Hylle, Sweden.



Landvetter International Airport, Sweden, joint venture.

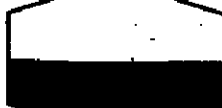


Television House in Muscat, Oman.



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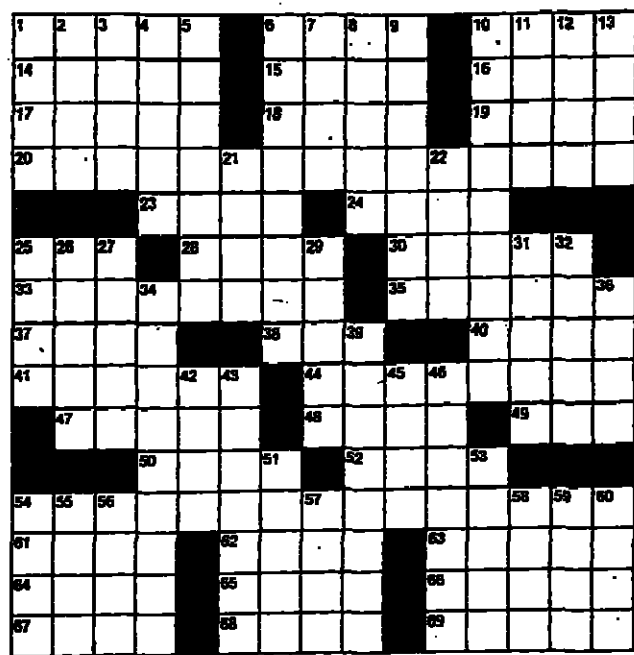
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Swiss Reserves Rise

ZURICH, Dec. 27. (Reuters) -- Switzerland's foreign currency reserves rose 998 million francs (\$498.7 million) to \$1.92 billion francs in the week ended Dec. 22, the Swiss National Bank said.

CROSSWORD

By Eugene T. Maleska



- ACROSS**
- He saw angels on a ladder
 - "Two Mules for Sister..." 1969 film
 - Apparatus
 - Allowance for waste
 - V.I.P. of India
 - Jewish month
 - Culture medium
 - Outside: Prefix
 - Promptly
 - Variety of quartz, used as a gem
 - Young oyster
 - Gypsy
 - Greek letters
 - "Sesame Street" grouch
 - February birthstone
 - "...waters are sweet": Prov. 9:17
 - Garb for 16
- DOWN**
- Napoleon won here in 1806
 - Came to earth
 - Price
 - Food fish
 - Outranked by Carmichael
 - Parish hit song: 1929
 - Greek craft
 - Runs the harvester
 - One of the Fates
 - Heavy outer garment

WEATHER

	C	F		C	F		
ALBANY	16	61	Fair	MADRID	12	55	Fair
AMSTERDAM	14	57	Cloudy	MIAMI	24	75	Cloudy
ANKARA	6	43	Overcast	MILAN	3	37	Rain
ATHENS	14	57	Cloudy	MONTREAL	4	40	Cloudy
BELGIUM	16	61	Cloudy	MOSCOW	-4	21	Snow
BELGRADE	4	39	Overcast	MUNICH	7	45	Cloudy
BERLIN	10	50	Overcast	NEW YORK	2	35	Sunny
BIRMINGHAM	10	50	Overcast	NICE	12	53	Overcast
BUDAPEST	4	39	Overcast	OSLO	-9	14	Fair
CASABLANCA	15	59	Rain	PARIS	11	52	Overcast
COPENHAGEN	-2	28	Snow	PRAGUE	7	45	Cloudy
COSTA DEL SOL	15	59	Cloudy	ROME	15	59	Mist
DUBLIN	9	48	Rain	STOCKHOLM	-9	14	Cloudy
EDINBURGH	14	57	Rain	TEHRAN	-	-	N.A.
FLORENCE	10	50	Overcast	TEL AVIV	10	50	Cloudy
FRANKFURT	7	45	Cloudy	TOKYO	10	50	Mist
GENEVA	10	50	Cloudy	TUNIS	20	68	Cloudy
HELSINKI	-16	4	Fair	VIENNA	4	39	Overcast
ISTANBUL	10	50	Overcast	WASHINGTON	12	53	Cloudy
LAS PALMAS	10	50	Overcast	WASHINGTON	1	34	Sunny
LISBON	10	50	Showers	ZURICH	6	43	Fair
LONDON	10	50	Rain				
LOS ANGELES	10	50	Cloudy				

(Yesterday's readings U.S. and Canada for T.M.)

(Yesterday's readings U.S. and Canada at 1700 GMT; Los Angeles at 2000 GMT; all others at 1900 GMT.)

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(d) Bond Fund	SP 73.55	(w) Alexander Fund	SP 64.00
(d) Bond Fund	SP 73.55	(w) Bond Fund	SP 73.55
(d) Bond Fund	SP 73.55	(w) Bond Fund	SP 73.55

BANQUE VON ERNST & Co. Ltd.

(d) CSF Fund	SP 15.70	(w) Capital Gain Inv.	SP 10.67
(d) CSF Fund	SP 15.70	(w) Capital Gain Inv.	SP 10.67

BRITANNIA TRUST (UK) Ltd.

(w) Britannia Trust	SP 15.70	(w) Britannia Trust	SP 15.70
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CAPITAL INTERNATIONAL

(w) Capital Int'l Fund	SP 15.70	(w) Capital Int'l Fund	SP 15.70
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CREDIT SUISSE

(d) Actions Suisse	SP 28.25	(w) Actions Suisse	SP 28.25
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DIT INVESTMENT FRANKFURT

(d) DIT Fund	SP 15.70	(w) DIT Fund	SP 15.70
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FIDELITY FUND INC.

(w) Fidelity Fund	SP 15.70	(w) Fidelity Fund	SP 15.70
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G.T. MANAGEMENT LTD.

(w) G.T. Fund	SP 15.70	(w) G.T. Fund	SP 15.70
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JARDINE FLEMING

(w) Jardine Fund	SP 15.70	(w) Jardine Fund	SP 15.70
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LLOYD BANK INTL. (POB GENEVA) LTD.

(w) Lloyd Fund	SP 15.70	(w) Lloyd Fund	SP 15.70
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ROTSCHILD ASSET MGMT. (BERNE)

(w) Rothschild Fund	SP 15.70	(w) Rothschild Fund	SP 15.70
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SOPHIE GROUPE GENEVA

(w) Sophie Fund	SP 15.70	(w) Sophie Fund	SP 15.70
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SWISS BANK CORP.

(w) Swiss Fund	SP 15.70	(w) Swiss Fund	SP 15.70
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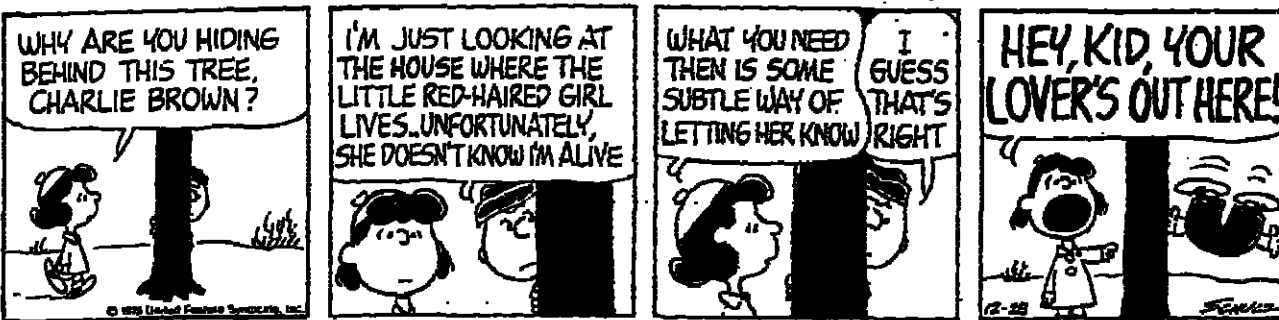
UNION BANK OF SWITZERLAND

(w) Union Fund	SP 15.70	(w) Union Fund	SP 15.70
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UNION INVESTMENT FRANKFURT

(w) Union Fund	SP 15.70	(w) Union Fund	SP 15.70
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PEANUTS



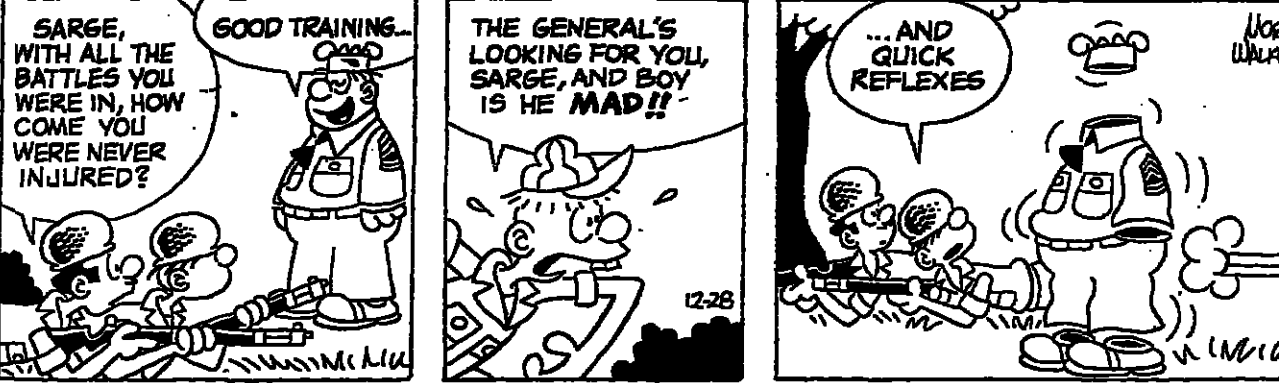
B. C.



BLONDIE



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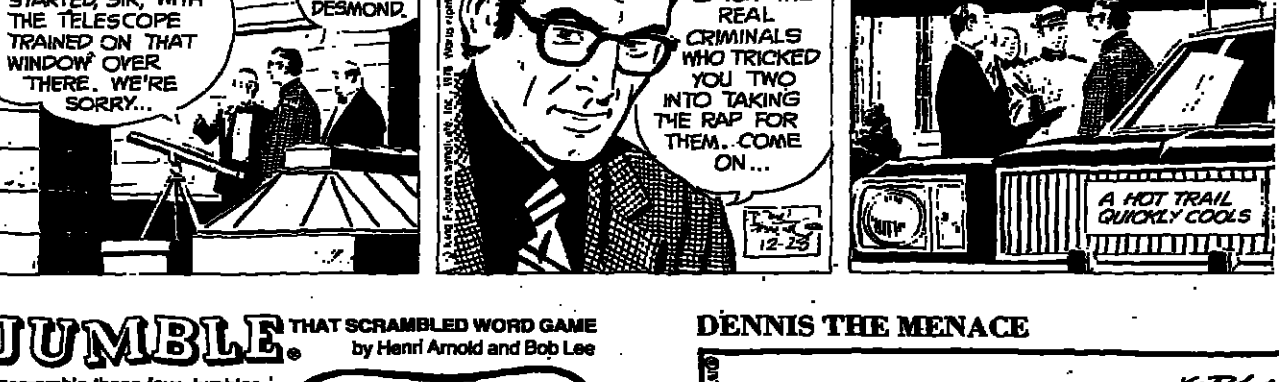
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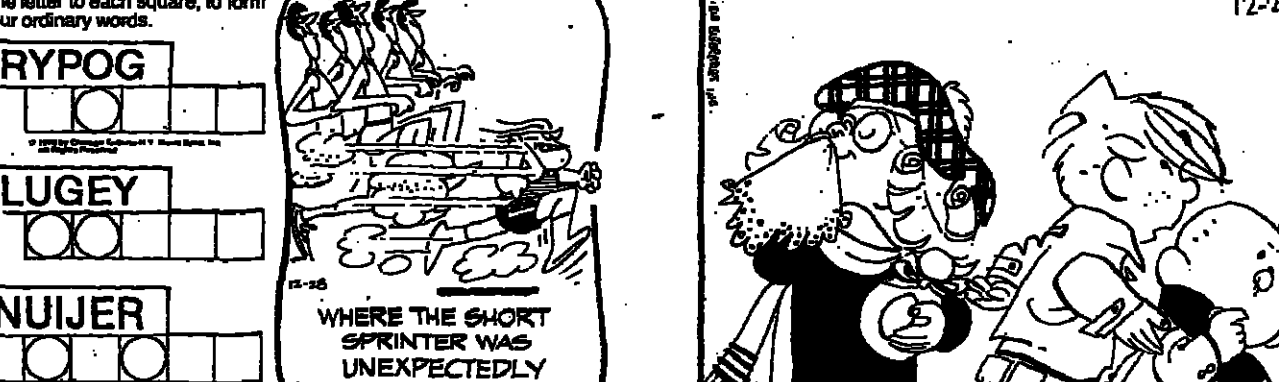
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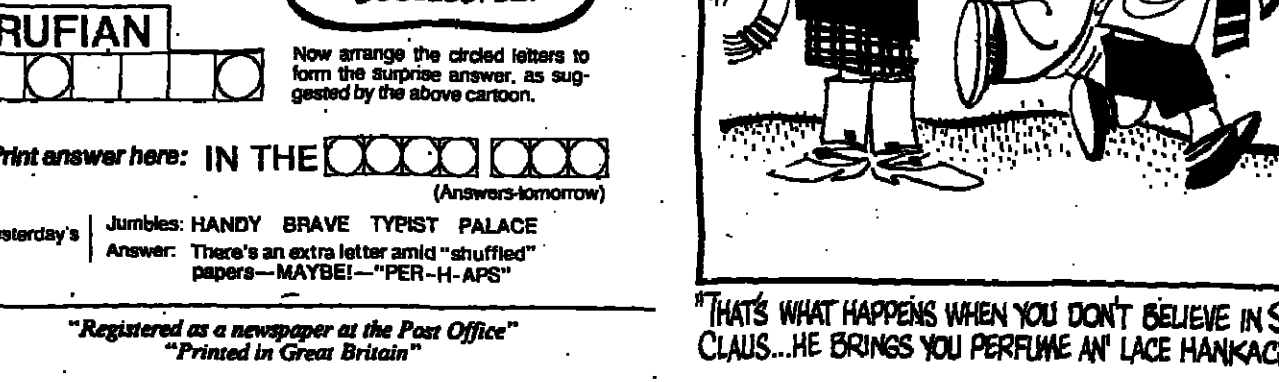
RIP KIRBY



JUMBLE



DENNIS THE MENACE



BOOKS

ON HUMAN NATURE

By Edward O. Wilson. Harvard. 260 pp. \$12.50.

Reviewed by Christopher Lehmann-Haupt

IT WAS fun but essentially unenlightening when writers like Robert Ardrey and Desmond Morris informed us that people obey the same behavioral laws as animals. After all, the serious ethologists were sticking to their guns, their bees and their sticklebacks. But now comes Edward O. Wilson, bearing heavy credentials: he is Frank B. Baird Jr. Professor of Science and Curator of Entomology at the Museum of Comparative Zoology, Harvard University. And in his new book, "On Human Nature," the third volume in a trilogy of which "The Insect Societies" (1971) and "Sociobiology: The New Synthesis" (1975) formed the first two parts, Wilson is assuming more or less the same thing that the ethological popularizers did. "The question of interest," he writes, "is no longer whether human social behavior is genetically determined; it is to what extent. The accumulated evidence for a large hereditary component is more detailed and compelling than most persons, including even geneticists, realize. I will go further: it already is decisive."

Indeed, so certain is Wilson of this premise that he doesn't put the emphasis on its validity. True, the foundation of the book rests on four chapters devoted to the genetic basis of, respectively, aggression, sex, altruism and religion in human behavior. And true, in these four chapters he attempts to refine some recent ethological insights, arguing, for instance, against Konrad Lorenz and Erik Fromm, that "human aggression cannot be explained as either a dark-angelic flaw or a bestial instinct," but rather — and the distinction here is fine but decisive — that "Human beings are strongly predisposed to respond with unreasoning hatred to external threats and to escalate their hostility sufficiently to overwhelm the source of the threat by a respectably wide margin of safety." But "On Human Nature" is not basically a description of biologically programmed man.

Nor is Wilson much concerned with defending the evidence for genetically determined behavior. The proofs he refers to are familiar, by and large — that animal biology evolved in such-and-such a way, and that all we need to do to confirm that human behavior is bounded by evolution is to compare the behavior of "lower" animal species, such as apes and insects, with that of "contemporary societies whose culture and economic practices most closely approximate those that prevailed during prehistory." But Wilson is scarcely rigorous in his marshaling of evidence. As he explains in his preface, his book (as the earlier two books in the trilogy

had been) "is not a work of science. It is a work of art." No, what Wilson is really preoccupied with here are the implications for humankind of the new truth that our behavior is rooted in our heredity. The implications, as he presents them, may be divided for purposes of description into categories major or minor, although those that he treats as comparatively minor seem as thing enough.

Who, after all, can ignore the suggestion that "the biological significance of sex has been misinterpreted by the theoreticians of Judaism and Christianity," because we consider human sexual behavior in the evolutionary framework, then it appears that its primary is not procreation, but instead enhance male-female bonding? The point that homosexual which Wilson suggests may "normal in a biological sense," been wrongly condemned for being counterproductive? "How genes predisposing their carriers toward homosexuality sprang through the population if homosexuals have no children? One answer is that their close relatives or have had more children as a result of their presence."

Enhancing Mental Reproduction. But the two major implications that Wilson addresses — the dilemmas with which he frames entire book — these are too dire to ignore in their scope. One of them is resolved with an effort — namely, the dilemma implied by our "naturalness," that two species included, possessed of what beyond the imperatives created by its genetic history. For if Wilson correct when he asserts that human mind is a device for survival and reproduction, and reason just one of its various techniques, then it makes sense, as he (for suggests), to shape our social organization whatever will enhance survival and reproduction of mind.

But what of the further dilemma implied by this resolution — namely, the question, as Wilson frames it, of the human mind should obeyed and which ones might be regarded as sublimated? What, especially of Wilson's solution to that dilemma, which I understand it, is that, given genetically inherited need for a young myth, we ought to shuck it false ones suggested by tradition, religions and Marxism, and brace instead the core of science, evolutionary epic — the myth we will ever have?

Does Wilson's reasoning sound faintly circular and self-serving, given that his entire book, premised on scientific materialism and the evolutionary epic? also a touch arrogant? "Have comprehended the vast expanse of the world? Come, tell me all of it if you know," Wilson quotes, bearing Job. And answers: "We [scientists] do know and have told."

Perhaps they do and have. But the new religion. Before we embrace it, some of us want to see for ourselves the genes that determine religious thinking.

Christopher Lehmann-Haupt, book reviewer for The New Times.

BRIDGE

By Alan Truscott

The only bridge term borrowed from the boxing ring is the upturn, an attempt to deliver a knock-out punch from below. In bridge, the operation always concerns the trump suit, and the idea is to improve partner's prospects of trump tricks by forcing an overruff.

In the simplest form of an upturn, a player ruffs with a singleton trump queen to promote his partner's singleton king. But spot cards will often serve their turn for this purpose, and repeated upturns may be needed. An upturn is never called for by a defender who has more trumps than his partner. The East player on the diagramed deal did not understand this, and suffered cruel and unusual punishment as a result.

North-South proceeded slowly to four hearts after North had opened the bidding with one club. North's rebid of one no-trump, with a hand containing a singleton in partner's spade suit, would be favored by many experts in preference to a rebid of the five-card club suit.

West led the diamond queen, and South won in dummy with the ace and threw two diamonds on an upturn.

South overruffed and ruffed, and led another spade. We now have to ruff with the ace. But when he led a min winner and dummy ruffed with heart four, East found that, to his earlier error, he had "smothered," a very rare over-trump, two hearts were the trump, and whether he over or not, his heart eight would the declarer's lone ace.

Both sides were vulnerable. The bidding:

North	East	South	West
1♣	Pass	1♥	Pass
1NT	Pass	2♥	Pass
2♦	Pass	3♦	Pass
3♦	Pass	4♦	Pass

West lost the diamond queen.

South needed four of the 14 tricks, and would easily score he could score a ruff with dummy's small trump. So he led the spade jack. West had with the nine, a genuine ace on an upturn.

South overruffed, ruffed, and led another spade. We now have to ruff with the ace. But when he led a min winner and dummy ruffed with heart four, East found that, to his earlier error, he had "smothered," a very rare over-trump, two hearts were the trump, and whether he over or not, his heart eight would the declarer's lone ace.

D_c

smooth-turned body, his quick stride, his tireless activity, his invincible good nature combined with his spirit, gameness and lantry — wherever he went he made nothing but friends."

Off to Vermont

In 1788 when he was 41 and in delicate health, Justin Morgan, a farmer, moved to Randolph, Vermont, several years later making a visit to Connecticut, returning with a horse, which he stood at stud.

In 1798, the man died of tuberculosis, leaving an estate appraised at \$160,13. Evidently he had sold "the Morgan horse," for there were no animals attached to the estate.

"The Morgan horse," Hervey says, "passed from owner to owner and stood higher and yon in many places. In all of them he left behind him offspring so amazingly uniform in their similarity to their sire that they became commonly known as 'the Morgans.' They did not have to be led out and looked over to be identified — one knew them where one saw them coming. Like 'the old horse,' they could outrun, outstride, outpull and outcut anything else in Vermont; and buyers from the big cities could not get too many of them."

"The remount station which the U.S. Cavalry maintained for years in Vermont," Sparse writes, "periodically ran extended road tests of various remount types, carefully controlled and supervised. They found that the incredible Morgans could march enduringly under a load which was 20 percent of his weight — a 150-pound rider and 50 pounds of tack, equipment and weapons."

Nothing but Morgans

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was stallion to almost any kind of
 traction, her foal, nine chances out
 of 10 was just another Morgan. So
 potent was the blood that, wherever
 it ran, there the typical Morgan
 traits cropped out. As was said, the
 liking for it was like that for liquor
 "once its quality had been sam-
 pled, nothing else tasted so good."
 All his life, Justin Morgan was
 used as a common workhorse in the
 roughest labor while at the same
 time he would cover as many as 10
 or 12 mares a day. Yet he lived to
 be 32 years old — well past 100 for
 a mare, nothing died from the kick of
 a mare. Presumably he had made a
 pass at her.

said, "I was a stock, a Morgan
 said more Morgans and nothing but
 Morgans. Or when a Morgan mare
 was bred to almost any kind of a
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...the fact that the *in vitro* and *in vivo* results are in good agreement.

